LIGHTING SOUND International

THE ENTERTAINMENT TECHNOLOGY MONTHLY



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PHOTO: PHIL DEN

- Peter Pan: Sound Solutions at the National
- The Real Thing: Madrid's New Opera House
- UK Tour de Force for the Powerhouse Exhibition
- To protect and to serve: L+SI looks at Flightcases
- Set Pieces: Stage One in Profile
- International Show News Reports from Rimini and Shanghai



MAY 1998

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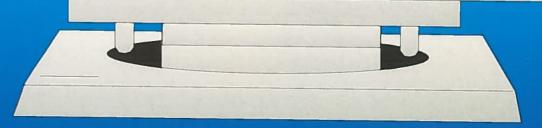
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LIGHTING SOUND News

Chinese Seal of Approval for PLASA Shanghai

PLASA Presents Light & Sound Shanghai gained the Chinese seal of approval when 4,845 Chinese and international visitors attended the show. The exhibition, which took place at Intex Shanghai from 14-16 April, featured 48 international manufacturers and distributors along with 37 local manufacturers. As the first venture into China by PLASA and P&O Events, it confirmed the need for a quality exhibition in commercial China.

The show included one of the largest ever trade missions of UK companies sponsored by the DTI to Shanghai. It was also one of the largest trade missions organised by PLASA. Exhibitors displayed the latest lighting and sound technology for entertainment centres, nightclubs, theatres, stadiums, ships, studios, shopping centres and hotels. As the first exhibition in a three-year period of sponsorship, PLASA and P&O Events are confident that the popularity of this first event will lead to a doubling in size in 1999. In addition to meeting potential new customers at the event, exhibitors also participated in a number of venue visits. The highlight of these visits included a trip to the Shanghai Opera House and to the Oriental Television Centre where exhibitors enjoyed a



PLASA treasurer David Hopkins OBE of Audio Design Services with P&O show director James Brooks-Ward launch Shanghai 98.

Chinese banquet followed by a tour of the venue and a trip to one of China's leading nightclubs.

Some 810 people attended the nine seminars sponsored by the DTI, and spearheaded by leading manufacturers.

PLASA Presents Light & Sound Shanghai will take place at Intex Shanghai from 13-15 April 1999. For exhibitor information contact Marcus Bernie on tel: +44 (0)171 370 8231.

A Full report on Shanghai appears elswhere in this issue.

TOA Acquire BBM

TOA Corporation of Japan has announced the acquisition of BBM Electronics Group Ltd of Morden, Surrey, the manufacturers of Trantec Systems radio microphones. The current shareholders and directors of BBM, Steve Baker, Dave Binks and Chris Gilbert, will remain with the company as employees and directors.

BBM is one of the largest manufacturer of DTI-approved radio microphones in Europe. The company's radio systems are sold to the music and leisure industries, broadcast companies, public address, theatres and professional rental companies. TOA are well known as manufacturers of professional sound equipment with an extensive product line and have operations in the Far East, North America, Germany, France and the UK. The transaction brings together two market leaders. TOA will benefit from the inclusion of BBM's innovative radio systems into its already extensive product range, while BBM will gain the benefit of TOA's global resources and marketing network.

PLASA AGM

The PLASA Annual General Meeting will be taking place at the Marriott Forest of Arden Hotel and Country Club, Warwickshire on the 10 June 1998. As last year, PLASA will be holding a pre-AGM dinner on the 9th June to which all PLASA Members are invited. After dinner entertainment will include speakers Richard Noble - designer of the Thrust Supersonic Car and Radio Four's sports presenter Garry Richardson.

If you would like to attend either of these events contact Norah Phillips at PLASA on tel: (01323) 410335.

Peter Sarner

Peter Sarner, managing director of Sarner International, died suddenly on 10th April 1998 from a heart attack.

The industry will be greatly saddened by his loss as Peter had been involved in Britain's audio visual visitor attractions

industry almost since it began. Originally enjoying a successful academic career in psychology, he decided to pursue his passionate interests in sound, light and image and established Sarner International some 30 years ago.



Over the years, he made numerous contributions to the development of the visitor attractions industry and gained a substantial reputation for both creative and technological innovation. This is evident through the wide range of projects in which his company is involved across the world.

Anyone wishing to make a donation to the British Heart Foundation in remembrance of Peter should send cheques or postal orders to Phil Tilstone at Sarner International Limited, 32 Woodstock Grove, London W12 8LE.



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KF900 SERIES

One musician plays acoustic guitar and sings into microphones less than 20 feet below a loudspeaker array reproducing those sounds at over 140 dB (@ 1m). 600 feet away, listeners hear the guitar pick on the steel strings, the string scraping across the steel fret as the string is bent. There's no feedback. The musician doesn't even use a foldback monitor.

Except where the upper tier shadows the lower, just 25 enclosures cover the entire 80,000 seat stadium. A successful world championship track meet at the facility helps the city reclaim its Olympic heritage, securing the 2004 Summer Olympic Games.

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EAW Gives Sound Dept Exclusive Deal

EAW International has appointed Sound Dept as its exclusive distributor in the UK for the full line of EAW products. Over the past five years, Sound Dept has grown to be one of the most significant distributors in their market, handling key lines including Ashly, Crest, Community, Sound Advance and others. Corin Myatt, Sound Dept's technical manager for the past year, will act as UK product manager for EAW. By mutual agreement, EAW and LTP Audio, the previous UK distributor, will discontinue their relationship. LTP will now focus on its projects division, which provides turnkey solutions for both lighting and AV installations.

Avesco Invest in LED

Avesco Plc have secured an order of 177sq.m of high resolution LED screens from SACO Smartvision Systems in Canada. The total value of the order is in the region of £4.5 million.

David Nicholson, Avesco's chief executive told L+SI: "David Crump, Screenco's managing director, spent many months researching the LED screens market before a decision was made. The equipment will be used by our European operating companies Screenco and JVR, and will allow us to meet the growing demand from our international customers."

David Crump added: "SACO are currently the LED market leader and have the resources to further develop LED screen technology in the future. They have sold screen systems to U2 for their Popmart World Tour, to Disney for Disneyworld in Florida and for the current Spice Girls tour."

Avesco will also be ordering a further 50sq.m for its Australian joint venture company.

People News

In a surprise move Simon Garrett, marketing manager at Unusual Rigging has departed to seek pastures new. He intends to return to managing events. Having conjoured with VE and VJ

Day you'd have thought he'd climbed that mountain, but Garrett clearly retains a passion for the sticky end of presentation.

Graham Hendry has moved up to the post of technical manager at Tannoy, after 10 years in the engineering and R&D departments. Hendry will now head the product management and worldwide technical and application support. New to Tannoy's sales team is John Buchanan, a graduate of the University of Strathclyde, who joins the company from Caledonian Acoustics in Ayrshire. He will be responsible for sales to Scandinavia and the Middle East.

Northern Light has been joined by Simon Brophy in its special projects department. Brophy has wide experience in the fields of lighting and sound, including work with the Welsh National Opera, Unusual Rigging and The Royal Opera House, and has recently completed a year in South

East Asia working as project consultant/designer on a variety of entertainment complexes.

beyerdynamic have appointed two new members to their sales team: Nick Murton has joined the company as sales manager for London and the South East and Richard Clark will be broadcast sales manager. Murton is a familiar face to the industry working previously with Behringer and JHS, whilst Clark was previously with Alice Soundtec for six years where he gained experience of the broadcast industry.

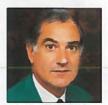
Mark Perrins has been appointed European sales and marketing manager for Marantz Professional, a division of Marantz Europe BV.



Graham Hendry and John Buchanan.



an Lamb.



Phil Tilstone.



cott Wakelin.

Perrins will be working closely with product manager Henk Biemans, to increase the company's sales and develop its growing European business.

Blitz vision have recruited **Diane Lawler** and **Jane Aird** to their hire desk team.

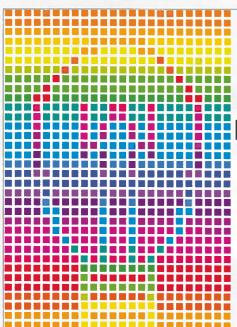
Lawler previously worked at Thorn EMI Computeraid, while Aird graduated from the University of Luton in 1996 and has since worked in marketing for Senate Electrical and Epson UK.

Ian Lamb has been appointed as assistant to Vertigo Rigging's director Rebecca Loughran-Roberts. Lamb worked as a freelance rigger for many years which included regular stints for Vertigo - until his rigging career came to an untimely end following a collision with a motorcycle. The road to recovery has been arduous, but Lamb has been aided by the support he has received from Vertigo colleagues. This has culminated in the creation of a new position which has been specifically tailored to take into account his restricted abilities in certain areas.

Scott Wakelin has joined Marquee Audio to service the growing demand for professional system installations in concert and club venues. Wakelin was previously with Audio Projects and

prior to that Crest (UK), having graduated from the School of Audio Engineering.

Sarner International Ltd has appointed Phil Tilstone as managing director. Tilstone served 25 years in the RAF before starting with Sarner where he has held the role of operations director, responsible for the day to day running, since 1996. In addition, Ian Revens has been appointed as head of production services and will be handling creative projects from concept through to completion, Ross Matthews joins as visitor attraction co-ordinator - a key member of the concept team and Tim Warner has been recruited as an architect and senior designer.



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Amy's View



Amy's View, a play by David Hare, has just completed a highly successful West End run at The Aldwych, which followed its launch last year at The National's Lyttelton Theatre. The production was directed by outgoing RNT artistic director Richard Eyre and designed by Bob Crowley with lighting design by Mark Henderson.

The Lyttelton invested in the purchase of a projection package from Production Arts when they first staged the show. The projection element was specified by Richard Eyre himself and designed by his long-standing artistic collaborator Wendell Harrington. Slide production was handled by Wyatt Enever of DHA, while the equipment deal was negotiated between Production Arts and The National's Mike Atkinson. It consisted of two Pani BP4 projectors with slide changers and dimming shutters, plus lenses.

When the show transferred to The Aldwych Theatre, where it was produced by Robert Fox and production managed by Rodger Neate, the same projection package followed suit - this time as a rental from Production Arts.

NJD's Merlin on Club Circuit

NJD's range of lighting effects have been installed at three UK nightclubs recently, all with lighting control provided by NJD's Merlin 256-channel lighting console.

At The Light House in Hartlepool, Leamington Sight & Sound installed a wide range of NJD effects, including Blitzers, Predator scanners, Chroma colour changers, Sword effects, RAP rotary advertising projectors, Datamoon flower effects and Xenon 25 strobes. Several effects from Programmi Sistemi were also installed, all controlled by the Merlin. The total spend on The Light House came to almost £1m, and included large-screen projection, a colour changing glass dance floor (using Chroma 250s) and a Martin Audio sound system.

A similar NJD spec was included in the new lighting installation at Key Street in Clitheroe, which was carried out by the Nottingham Light & Sound Centre, and at the Club Mirage in Bradford, installed by Sounds Incorporated of Pontefract. In all cases, the Merlin control was chosen for its ability to switch quickly between automatic and DJ control modes.

TP Kit for Kat

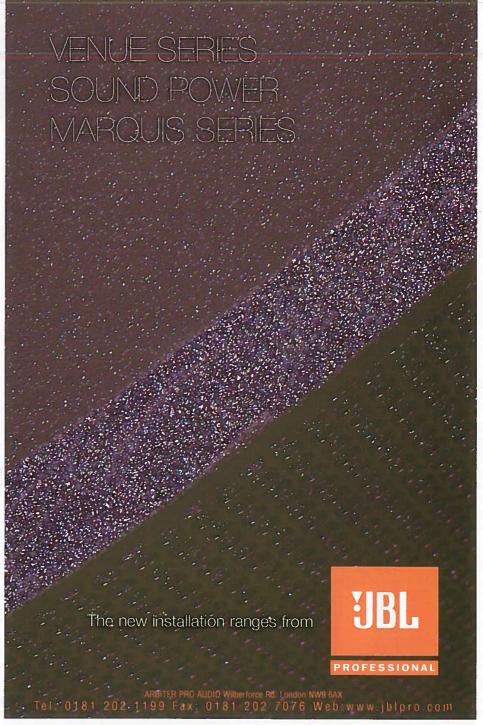
Theatre Projects have supplied the lighting for Kat and the Kings, which opened at the Vaudeville Theatre in late March. TP supplied both automated and conventional lighting. All the luminaires were operated from an Artisan Plus console using a UDM universal DMX module.

TP have also supplied lighting equipment for an in-the-round performance of Madam Butterfly at the London's Royal Albert Hall and the National Indoor Arena in Birmingham. LD Andy Bridge used 22 VL6 spot luminaires, 28 VL5B wash luminaires and 200 conventional lights, mainly consisting of ETC Source 4s.

Le Mark on Song



St Ives-based Le Mark Group are to supply their Studiotak self-adhesive studio floor covering for the set of this year's Eurovision Song Contest. They will supply 18 1.22m x 50m rolls of highgloss black Studiotak to their client Fabry Trading, the appointed set builder for BBC Television.



Geneva Motor Show

The Geneva Motor Show has turned a few heads this year, not least for a peek at the replacement to the Escort - the Ford Focus - plus the Cougar and Puma (also from Ford) and a three day outing of the new Rolls Royce. But the show has mainly turned heads for the way Ford, with considerable input from Imagination, has transformed the concept of how to present at a car show.

The main problem with car shows is that exhibition managers define parameters which are aimed at avoiding conflicts between adjacent manufacturers' stands. In view of these limitations, the solution seemed perfect - a temporary building immediately adjacent to the main Expo 92. "The go ahead was only given on the 17th January," reported Ollie Watts of Edwin Shirley Stages, "hardly any time at all to prepare what was proposed."

Fortunately, the basic nuts and bolts of the structure were already in stock. ESS used two of their roof structures to provide the framework to the building, which had to span a highway that ran immediately outside the exhibition hall. "What we had to do," explained Watts, "was to straddle the road at a height of six metres, allowing free passage for vehicles below." A difficult task when the total area to be spanned covered 47 by 16 metres, and the installation had to be completed overnight.

Using eight of their standard Towers to provide support, the final building is capable of supporting a total load of 376 tons. Remarkably achieving the 'total load' appears to be exactly what Imagination have done. From within the main exhibition a 60m pedestrian bridge vaults across the hall, through the outside wall, and into the ESS structure. Built by Sheet Fabrications in Nottingham, the bridge is 10m wide at the base, tapering to 5m at the top, its surface is clad with aluminium edging and it stands on finely detailed legs. The imperative 'customer connection' was achieved by visitors traversing the bridge, meeting 'Ford customers' - actually recorded video images displayed on Fujitsu Plasma screens in life size.

But the more theatrical elements were in the ESS structure. Steve Porter from Unusual Rigging, who was responsible for rigging the contents of the ESS add-on, said: "There's absolutely everything in there. I've hung four cars, 3,500ft of truss, a 360 degree projection screen and 16 Barcos (from Creative Technology), and those amazing new Plasma screens made by Fujitsu."

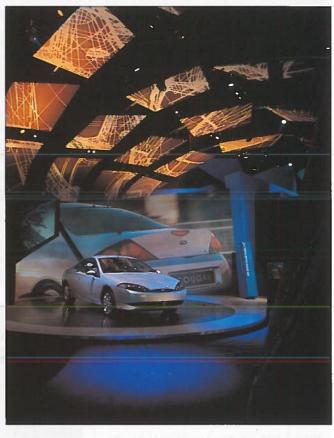
The interior was divided into three areas; a design area portraying vehicle design; a driving dynamics area which dealt with aspects of road holding, safety and braking and a display dealing with Ford ingenuity, centre stage being taken by a new, lightweight hybrid diesel/ electric car from the US. The total contents are too lengthy to describe but if your imagination has been teased then you'll be pleased to learn the exercise will be repeated in Turin, Madrid, Berlin, Hanover, Paris and possibly Birmingham later this year.

But the rest of the show can't go unmentioned, with the increasingly European aspect to all things 'commercial presentation' such shows represent work for all and the UK service industry is well represented. Within the main hall of the exhibition is a 'slugfest' of every piece of presentational

equipment imaginable, too many to list here, but to pick out just one UK supplier in amongst the many European service companies gives perhaps a better insight to the more standard fayre of the show

System Sound provide equipment for both Opel and Rolls Royce. "The Rolls Royce thing came at rather the eleventh hour," explained Simon Biddulph. "We were already providing gear for the official launch of the new model up at their Crewe factory when they turned round and said, 'Oh by the way. . . '". Refreshing to know that British firms haven't lost their touch when it comes to confusing the opposition (even if they are now Bavarian owned). The Geneva show was used by RR just for a few days to reinforce the arrival of the first new model in 30 years. System Sound's involvement required just a modest amount of playback gear (Denon 1050 mini disc) and a radio mic system (the AKG 800 series) with E3s, F2s and B1s from the d&b range.

The Opel stand was altogether a more ambitious project which included virtual reality



headsets for an audience of 18. A development for Park Avenue, the movement element of the system was designed in-house by System Control's Nigel Robb, Biddulph programmed the audio side, while Martin Pilton provided most of the input for the headsets. The seats were fitted with Aura piston-style drivers (more a solenoid than an audio device - for that sensurround feeling). For the launch of the new Astra, Park Avenue commissioned E\T\C UK to provide large format projection for a rolling 30 minute show which would run for 12 hours each day. Two 5kW PIGI double scrolling projectors were used on each of four rear-projection screens.

As was said, the equipment content of the show was vast - a bunfight that left no sound and lighting manufacturer unrepresented. But ultimately it was the theme used for the Ford stand that merited most attention and may have set a new trend. Will we see the NEC surrounded by temporary structures next year? Don't be surprised.

Steve Moles



THE INTER-CHANGEABLE REVOLUTION



Stage COLOR 1200

A 4-disc cyan, magenta, yellow and amber colour mixing system provides an infinite number of rich hues plus a full range of pastel shades - sure to meet the approval of the most discriminating lighting designers. The exclusive GTC (Gradual colour-Temperature Correction) system provides gradual correction of colour temperature differences from one luminaire to the next. You can choose between three diffusion intensities



These are just some of the great features you will find in Stage Color 1200, the most powerful and imaginative washlight for advanced applications currently on the market. Stage Color is revolutionary, thanks its easy conversion into the Stage Zoom 1200 effects projector.

JUST A FEW MINUTES TURNS A WASHLIGHT INTO AN EFFECTS LUMINAIRE OR VICE VERSA

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The basic unit for both fixtures is electrically and mechanically identical, so you can build up the luminaire you need at the very last moment, even just before the show begins! And do it yourself, with no need for expert help.

Both luminaires use an HMI 1200 lamp, the number one choice for professional use. Both luminaires also have generous pan (450°) and tilt (252°) angles with smooth movements and microstepping resolution selectable between 8 or 16 bit.

Hot restrike and lamp control from the desk, along with automatic repositioning after any accidental movements. The convenient transport lock on the moving body make this a highly practical unit.

The standard unit is equipped with an electronic ballast, although a conventional electromechanical system is available as an option.

Stage ZOOM 1200

The 12°-24° lens with zoom and focussing controlled from the desk gives you a wide range of projection angles. The CMY colour mixing system offers an almost limitless palette and is supported by two colour-temperature correction

filters (3200 and 5500 K).

The frost effect offers complete linear variation, allowing a spectacular transition from a hard-edged beam

to an increasingly diffused wash. Stage Zoom 1200 is also packed with graphic effects including static gobos, rotating gobos and rotating prisms. They are all fully combinable and all with indexed positioning through 540° so that a given effect can be repeated on several luminaires. These are just some of the exciting new features of Stage Zoom 1200, the sophisticated new moving-body effects projector. Stage Zoom is revolutionary too, thanks its easy conversion into the Stage Color 1200 washlight.

Distributor United Kingdom





NEWS Shorts

The National Theatre has recently purchased a Yamaha **02R Digital Recording Console** from Marquee Audio to use on a wide variety of different projects within the theatre's busy sound department. The department uses the 02R in pre-production for all the shows, where specially recorded samples, effects and sequences have to be created using a wide range of synthesisers, samplers and prerecorded material.

Unusual Rigging recently removed the existing stage structure at The Bristol Hippodrome and replaced it with a completely new steel grillage and timber stage in less than four weeks. The work was undertaken to level the stage and enable large-scale musical productions to be staged.

Production Arts at the Grammies



Bob Dylan and Will Smith were among the winners at the recent Grammy Awards ceremony, which included large format projection systems supplied by Production Arts of New York. The system included six E\T\C Audiovisuel PIGI projectors with double scrollers, which were mounted on platforms behind the stage and projected onto a 30ft by 60ft screen. In addition to providing projection equipment for the awards, Production Arts also supplied media production services and a two-person crew.

This is the second Grammy Awards ceremony to use the increasingly popular large format projection. The projected image has enough punch to register through the stage lighting and provide a strong enough image to be read by the television cameras. Large format projection has also recently been used on the Academy Awards, The American Music Awards and the MTV Music Video Awards.

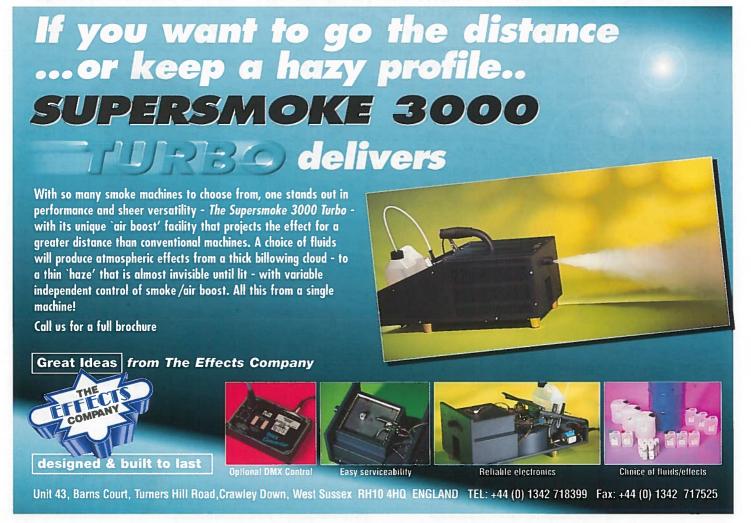
Vital Vertigo

Vertigo Rigging have had a busy March and April, rigging for events as diverse as Andrew Lloyd Webber's 50th Birthday celebrations at the RAH, to a month long series of separate, but interlocking, Westminster-based political and cultural events.

Rigging for Lloyd Webber's party had to be achieved in just 24 hours. Vertigo rigged a total of 54 points - plus pick ups for the organ black. The organ end of the hall was completely concealed by drapes hung from Vertigo custom-fabricated curved aluminium scaff tube - so the drape was neatly fitted exactly to the shape of the hall. The organ itself was revealed at a strategic point during the evening - by an opening star cloth.

The 14 metre diameter circular stage was positioned in-the-round in the centre of the auditorium, accessed by two walkways which formed a V-shape as they rose up towards the stage end of the hall. These walkways terminate at what would normally be the stage left and stage right entrance doors. Overhead were six V-shaped trusses with apexes pointing towards the auditorium. A further five satellite trusses were positioned over the stalls for audience lighting. Vertigo also provided trussing for camera track at the front of the hall plus trussing and motors for two 'hot heads' that were continuously in motion throughout the event. Sound rigging consisted of a large centre cluster, a smaller one over the stage and two flown side stacks.

Additionally, Vertigo transported (via motors) two one ton scissor lifts to the centre of the arena - these were too heavy for the ramps. The production company was ShakerMaker (who contracted Vertigo) and the event was production manager by Jeremy Sturt and Lee Ed.



THE SHOW-LIGHTING REVOLUTION



Stage COLOR 1000

Stage Color 1000 is the washlight that solves colour temperature variation problems at the source thanks to the use of a 1000 Watt halogen lamp.

Designed and built for the needs of television and the theatre, this luminaire uses a 3-filter CMY colour-mixing system to give the exact colour required.

A frost filter of the latest generation provides a wide aperture and perfectly uniform light intensity over the entire illuminated area.

With ovalized projection, electronic dimmer. beam stopper and strobe, the features of Stage Color 1000 are guaranteed to satisfy even the most demanding lighting designer.

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These fine luminaires also share generous pan (450°) and tilt (252°) angles with smooth movements and microstepping resolution selectable between 8 or 16 bit. Both fixtures have automatic repositioning following



any accidental move-

ments thus eliminating time-consuming realignment procedures, together with a convenient moving body lock system for easy transport.

Stage COLOR 575

Stage Color 575 uses a tried and tested HMI 575/SE discharge lamp with optional hot restrike and on/off control from the lighting desk.

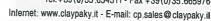
The 4-disc cyan, yellow, magenta and amber colour mixing system can generate infinite variations of tone, with a range of beautiful pastel shades to create special atmospheres not possible using conventional 3-colour systems.

The luminaire is complete with GTC, the exclusive Gradual-variation colour Temperature-Correction system.

3 filters for 3 different intensity frost effects, special effects, ovalized beam, beam stopper, strobe and mechanical dimmer are just some of the features of Stage Color 575, the washlight that offers the maximum creative potential supported by unparalleled reliability.



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NEWS Shorts

The Wharfedale Diamond 7.1 streaked ahead to first spot in the latest GFK top sellers chart of loudspeakers in the UK market during the four-week period up to 21st February, 1998.

Safe Working Ltd are again holding a Rigging Course at Wembley Arena on 26-27th May and 4-5th June. The course covers both practical and theoretical elements designed to be an introduction to basic rigging skills. For further details telephone 0181-674 5645.

Ultimate has secured distribution of the AKG range of UHF wireless headphones due in the UK at the end of May. Based on radio transmission technology, the K415 UHF and K315 UHF headphones receive signals up to 100m away.

AVAB transtechnik/ Multiform Deal



Avab transtechnik Ltd have appointed Multiform Electronics as their National Service Centre for Great Britain. Multiform Electronics will provide both factory and on-site service facilities for AVAB transtechnik's lighting consoles and dimming systems. In addition, the two companies have also created a commercial cooperation arrangement whereby Multiform Electronics will design and manufacture certain products to be exclusively marketed by AVAB transtechnik both throughout the transtechnik group and through their own AVAB transtechnik Sales Support Centre in Great Britain and Ireland. The new partnership was announced at the ABTT Trade Show in London in late April where the two companies exhibited together to launch the first product of the new partnership - the Presto 610 Dimmer Pack.

Pictured above is Clive Cartey of AVAB transtechnik (right) and lain Price-Smith, MD of Multiform Flectronics.

Full report from ABTT next issue.

White Light Workshops

White Light have announced plans for a series of open days designed to allow anyone interested to learn more about different areas of modern theatre lighting technology. The White Light Wednesday Workshops will be held on Wednesday mornings at the company's Fulham base.

The workshops will cover areas such as new lighting equipment, automated lighting technology and modern lighting controllers, with sessions focusing on products from different manufacturers. Visitors will be free to play with equipment, while representatives from White Light, The Moving Light Company and the equipment manufacturers will be on hand to answer questions.

Details of the workshops can be obtained by calling White Light on 1071-731 3291, or visiting their Web site at http://www.whitelight.ltd.uk.

Total Customisation

Total Fabrications came to the aid of Howard Eaton Lighting by creating three customised 4.8m continuous truss sections to act as lighting bars on the new tour of *Phantom of the Opera*, which opens this month.

The trusses needed to have the usual integrity of TFL's products, but none of the conformity. Each length had to be of different width to accommodate different fixtures, and include off-set gaps at specific points to allow pieces of flying scenery to pass through. The finished system drops neatly onto dollies for shipping and takes just 90 minutes to rig.







THE COMPACT REVOLUTION



Stage COLOR 300

Presenting an ultra-compact washlight with a high-quality Fresnel lens, plus an efficient and spectacular fading frost effect with perfectly linear variation.

The innovative frost system provides a unique 50° aperture with uniform light intensity over the entire illuminated area, which greatly reduces the typical loss of brightness associated with conventional diffusers.

The CMY colour mixing provides an infinite varied palette, allowing lighting designers to choose exactly the right tone of colour for each scene. With a dimmer and beam stopper on separate independent channels, Stage Color 300 achieves a level of performance previously available only from far larger and more powerful luminaires.

PINT-SIZE FIXTURES WITH BIG PERSONALITIES

Clay Paky have revolutionized the world of compact luminaires, making them so efficient and versatile that they are ideal for any type of environment and application. Both models use either the HTI 300 discharge lamp, offering the same features as the more powerful HTI lamps from which it is derived, or the brand new HMD 300 with a 3,000 hour average lifetime and colour temperature in excess of 5000 K. Equipped with a highly practical automatic repositioning device to correct accidental movements, both luminaires are also designed



for easy handling thanks to a convenient transport lock on the moving body. The wealth of functions provided by Stage Color 300 and Stage Light 300 makes them an ideal duo for professional and discotheque applications. Thanks to Clay Paky, top-level performance and compact dimensions are no longer conflicting requirements in the world of professional show lighting.

Stage LIGHT 300

Presenting an ultra-compact effects luminaire equipped with electronic focusing and a manual zoom lens for a wide range of projection angles. This unit provides unique features for a fixture in this category.

36 colour combinations, 2 filters for colour temperature correction and special effects filters combined with refined graphics equipment including 6 rotating gobos with indexed positioning through 540° and a 3-face prism. There is also a mechanical dimmer and a high speed strobe.

The superlative performance and features of Stage Light 300 rate it as the most advanced compact moving body effects projector on the market.



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NEWS Shorts

The **D.A.S.** brand of loudspeakers has made a significant impact into the expanding theme bar market. Now, with recently launched active powered DS 15A and Reference Series enclosures, a revitalised dealer structure and marketing strategy, UK distributor **Sennheiser** hope to increase D.A.S.'s market place in 1998

Set Lighting & Sound have added a new division to their company. Called simply The Hire Department, they have invested in 50 Martin Mac 500 and 600s and have been supplying all the intelligent lighting requirements for several major TV companies.

Marquee Audio have installed a Martin Audio ICT system on The Tattershall Castle, the leisure boat moored on The Thames. The system includes EM26 loudspeakers as the main sound reinforcement system, powered by three Yamaha P3500 amplifiers.

Live at the Loft

Hotel and casino giants, Stakis plc, have carried out a £250,000 refurbishment of their nightclub, The Loft in Milton Keynes. Part of the glass-encased Winter Gardens Complex, which also included the LivingWell Health and Leisure club, The Loft was fitted to a specification prepared by local technical specialists, Avanti Sound & Lighting. After an on-site demonstration this included a powerful Cerwin Vega! Intense rig, comprising flown T250s, in two pairs, backed up by eight groundstacked T36 sub bass, and a Cerwin Vega! ProStax PS15 for DJ monitor use. Cerwin Vega's UK distributors, Lamba, also supplied GMR's PM800NT eight-channel

mixer, with remote crossfade as well as the popular Stanton Trackmaster cartridges. Lamba are exclusive UK distributors for both companies. All the generic and moving lighting is



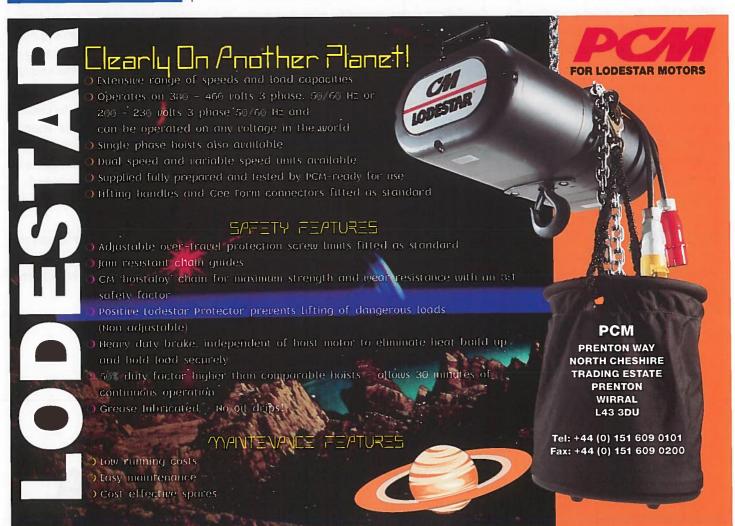
under the command of the compact Windowsbased Win Commander, now upgraded to full multimedia capability.

Strand's UK Training Academy and Competition

To further underline their commitment to training worldwide, Strand Lighting are setting up a Training Academy in the UK. This follows the initiative taken by the Central European Trading Division, who piloted the idea at the recent Frankfurt MusikMesse. Their first training event, held earlier this month, was well attended. Similar

Strand Academies will open in other Strand locations worldwide over the coming months. The courses are designed to provide operator training on the current Strand product range.

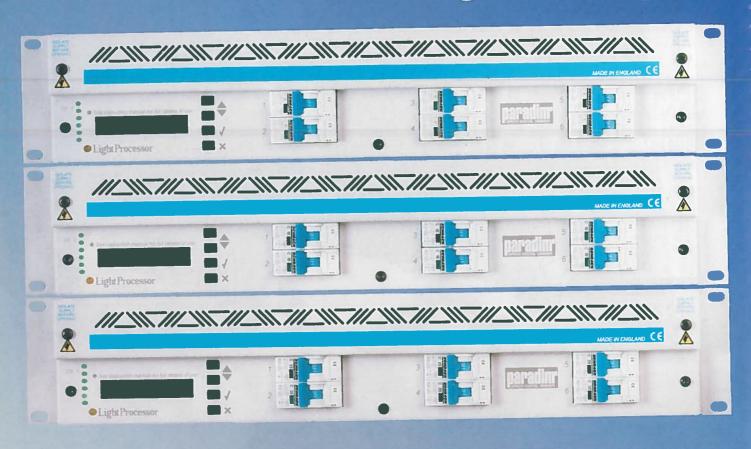
Following the success of its Lighting Competition last year, which was won by Long Eaton Community School, Strand is now inviting applications for the 1998 event which is open to all UK school drama departments and performing arts faculties. Entry packs will be available shortly and schools are invited to apply now to Bethan Dickson at Strand Lighting, fax 0181-571 3305. Details of the Training Academies can also be obtained on this number.



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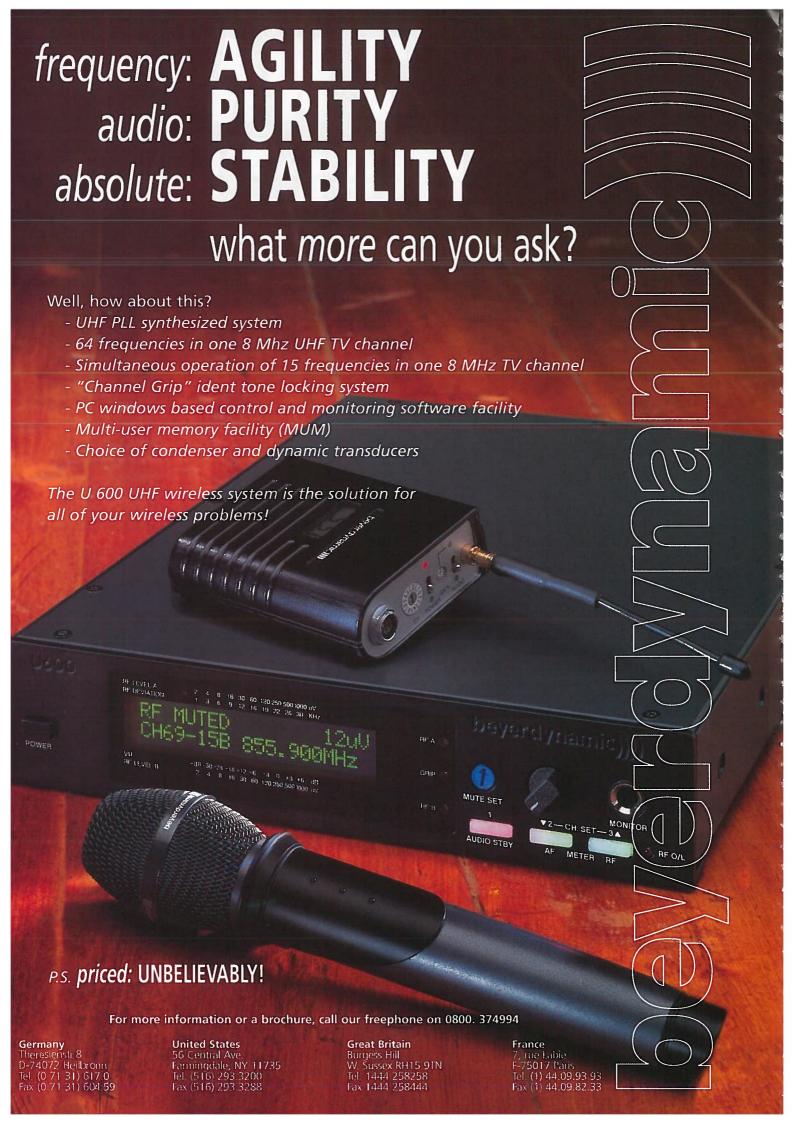




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White Light Rig for Saturday Night Fever

White Light has been awarded the contract to supply the lighting rig to the new musical production of Saturday Night Fever, which opened at the London Palladium on May 5th. The company's specialist moving light division, The Moving Light Company, have supplied the production's complex automated lighting system.

Designed by Andrew Bridge, who has won Tony awards for his work on shows such as *Phantom of the Opera* and *Sunset Boulevard*, the lighting rig is based around a core of automated units: 31 MAC 500 spotlights and 28 MAC 600 washlights. The control was handled by the meticulous Stuart Porter using a Wholehog II, which allowed him high levels of moving light control, whilst retaining the familiar theatre programming style.

One essential part of the Saturday Night Fever lighting production is the underlit disco dance floor. Originally Built by HELL, the complex modular structure was also 'built' in WYSIWYG, which enabled the dance floor to be preprogrammed in the London Palladium bar on a computer, whilst the real floor was still being fitted on the stage.

The automated rig is complemented by a conventional rig containing around 200 ETC Source 4 profiles, 47 Par cans and 37 Strand Cantata Fresnels, along with 60 Rainbow colour scrollers. The show will also be creating special effects using six High End Dataflash Strobes, four UV lanterns and 10 ETC Source 4 Pars, to be used with White Light VSFX disks as effects projectors.

Optikinetics Put Water in Sydney's 'Tank'



Lightmoves Technologies, Optikinetics' Australian distributor, have supplied 34 of the company's K2 projectors for a permanent public art installation in Sydney's Downing Centre.

The installation, called 'Tank', was designed by artists Jennifer Turpin and Michaelie Crawford to inspire a moment of contemplation for pedestrians passing between Sydney's Museum Station and the busy city centre street outside. The K2s are positioned behind a row of glass panels, 35m long and 4m high, creating the illusion of water moving in a backlit tank. The water effects are created using a pair of rotating distortion wheels in each projector.

The architects for the project were Peddle Thorp & Walker, with electrical design by Barry Webb & Associates and industrial design by Rigby Engineering.

Catch the Exhibitionists at dj Culture '98

The PLASA-sponsored dj Culture '98, which runs on May 30th and 31st at Manchester's G-Mex, is set to fulfil the promise it showed at its launch exhibition last year. Most of the big manufacturers will be there showing off their latest wares including Vestax who will be introducing two new mixers, whilst Roland will be launching their first ever dj mixer and Bassment DJ Supplies will be premiering their new EDS (Ear Defence Systems). Running alongside the exhibition, will be a number of specialist events, including an attempt to create a new world record for a non-stop live mix by as many DJs as possible on the stand of Media Records/Nukleuz. There will also be workshops ranging from 'How to be a top DJ' to 'Producing Your Own Record', but certain to be a crowd puller, is the Mixing Competition which will be held across the two days, with the final on Sunday afternoon. The winner will receive a slot on Galaxy Radio and a trip to Paris Mix' Move. Anybody who wants to enter or would like further details on the exhibition should contact Suzy Parish at P&O Events on 0171-370 8229.

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NEWS Shorts

The newly opened Vari-Lite Production Services, London, has supplied its first UK tour with Echo & The Bunnymen. Lighting designer and tour manager, Levi Tecofski, used VLPS London to provide 14 VL5, two VL5 Arc and six VL6 luminaires, plus smoke machines, truss and rigging for the tour.

Ian Partington, managing director and founder of Computer Experts (UK) Ltd and an authority on the Millennium Bug crisis and existing solutions, has written a program that shows people whether their PC Real time Clock rolls over from 1999 to 2000. The program is called Killer and can be downloaded for free from www.computerexperts.co. uk/pc2000.

Audio at the Carnival



High quality audio became an important issue when Sao Paulo recently held its famous Carnival at a special venue in the city called Sambodromo. With the audio provided by Fabio Zacarias' company, FZ Audio, the Carnival consisted of a number of parades, with an audience of 30,000 lining the 600m parade route.

The sound system requirements were very complex, with each section representing part of the overall theme. At the centre was a drum section, followed by a sound truck, containing a giant monitor system which supplied the necessary foldback both for singers on the roof and the drum section. Three trucks were featured in all - each with 10 of FZ's own mid-high speakers, processed with a BSS FDS-388 Omnidrive, and six EAW SM222 monitors, EQ'd using a FCS-920 Varicurve and FPC-900 Varicurve Remote. Along the route a total of 60 towers were distributed 10 metres apart, using 170 loudspeakers, including FZ-212 mid/high speakers and FZ 218 subwoofers. 20 BSS FDS-355 Omnidrive Compacts were deployed to control the entire system, providing the necessary crossovers, limiting, equalisation and delays. The sound from both the truck and drum sections needed to be synchronised with the towers in each case, with the individual towers assigned a delay value that varied with the distance of the truck. These delays were programmed on the BSS FDS-355 Omnidrive Compact with the aid of BSS custom software, allowing delays of up to 2.6 secs and controlled by a PC in the sound cabin.

Stagetec Collect Rose Bruford Contract

After over a year of negotiations with consultant Dorian Kelly from Illuminati, Stagetec (UK) Ltd have been appointed to supply and install the complete lighting system at the new Theatre in the Round at Rose Bruford College.

The package includes 168 channels of the new Light Processor Paradime digital dimmer packs, one of which will be used for house and working light control utilising the built-in remote controllable scene capabilities. The dimmers will be distributed through a custom-built Weiland patch bay to a total of 335 16A outlets spread around the building on a combination of internally wired bars and socket boxes. The lighting control desk will be the latest Compulite Micron 4D/ME 2048 channel system with fully integrated moving light control and Ethernet. The package also includes a complement of CCT luminaires.

Meanwhile, AVC Technical based in Slough have recently purchased two custom-built Compulite touring modular digital dimmer racks complete with Weiland patch and status reporting plus Compulite Spark and Spark 4D lighting consoles from Stagetec (UK) Ltd.

Included in the package are over 100 luminaires from CCT and Selecon, plus additional AKG UHF radio mic systems, all supplied by Stagetec.

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NEWS Shorts

AC Lighting have taken on exclusive worldwide distribution of the new 1000-channel Echelon lighting console from Australian manufacturer Jands. The Echelon, which features a hardware platform supporting a fully-featured version of the Wholehog II operating system, was attracting a great deal of interest at EnTech in Sydney recently. More details in next month's EnTech report.

Birmingham-based sound rental company SSE Hire, beat off international competition to win the tour sound contract for American Indie stars, Garbage. The world tour is the first to feature Soundcraft's new FOH consoles - the Series Five.

Mydonose, a new venue in Ankara, Turkey, is using a DDA QII console and Klark Teknik signal processing to help liven up the local nightlife. The audio installation was designed by Turkish audio specialists - SF Dis Ticaret.

Logic Finalise Academy of Sound Deal



Logic System's Helen Coleman and Chris Scott (centre) with Keith Woodcock (left) and Gareth Hunt (right) from the Academy of Sound.

The recent Frankfurt Pro Light & Sound exhibition provided the opportunity for Logic System to finalise a distribution deal with Academy of Sound, formerly known as Carlsbro. This deal gives AOS exclusive rights to sell Logic System products into the MI market through its network of six retail outlets across the UK.

AOS and Logic have been working together for some time now and a number of important sales have already been achieved, principally to professional working bands. Sheffield-based glam rock outfit 'The Gutter Band' have purchased two stacks of the CS1260 system, Leicester-based Bon Jovi cover band 'Blaze of Glory' are also using the CS1290 system, whilst Doncaster band 'The Complete Madness' are also enjoying a Logic rig.

TPC Honoured

Theatre Projects Consultants (TPC) was the theatre design consultant for five of the eight projects honoured with Architectural Awards at the United States Institute for Theatre Technology (USITT) convention held in Long Beach, California recently.

The five recognised projects were The New Amsterdam Theatre renovation (New York), The San Jose Repertory Theatre (San Jose), The Shubert Theatre renovation (Boston), Peery's Egyptian Theatre (Ogden, Utah) and The Chan Centre for the Performing Arts, University of British Columbia (Vancouver). TPC have collected 15 USITT Architectural Awards since the conception of the awards in 1994.

TPC have also recently been selected by Canadian developer TrizecHahn Corp to collaborate with architect David Rockwell on a new 3,300 seat theatre in Hollywood, which will become the permanent home for the Academy Awards presentations.

Lucky 13 for Marquee

Marquee Audio have completed the sound installation in the latest, and one of the most impressive Bar Coast outlets for Bass Leisure to date - designed by Cube in a picturesque Cambridge courtyard. It was a case of lucky 13 for Marquee, for this was the company's 13th Bar Coast install. Marquee opted for eight of RCF's Monitor 8s, which became the cornerstone of the audio fit-out. The system is powered by Yamaha P3500 amps, routed through a Cloud zoner and sourced from a Databeat programmable CD music system. Marquee also provided the lighting, including a 'retro' Optikinetics Solar 250 oil wheel projector and Martin Image Scans.



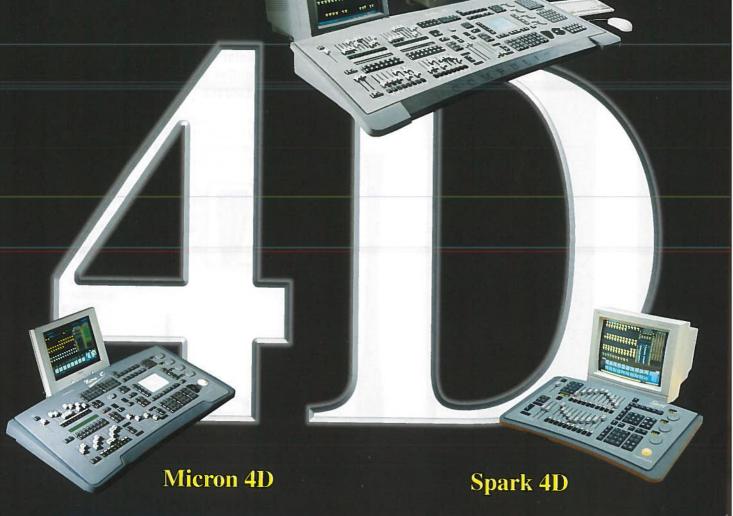






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White Light North Duo

Following our article in February covering the restoration of the fire-stricken Bradford Playhouse in which White Light North spec'd a new lighting system and supplied a Harkness Hall screen and counterweight system, the company have been involved in two more very unusual projects.

The first is an installation for Halifax Building Society who, keen to relay information to all its branches nationwide, converted a former storage facility in Yorkshire into a TV studio complex, complete with fixed rig, sets and two studios. The facility is used to record promotional videos, run live broadcasts and handle some aspects of staff training. WLN supplied a bevy of Strand lighting fixtures, together with six LD90 dimmers, three for each studio, controlled by a Celco desk from the company's hire stock.

Across the county, shoppers at the White Rose Centre in Leeds can also see a touch of the White Light North handiwork. Here the company worked with electrical contractors N G-Baileys to design a large gondola-shaped steel structure which hangs 100 feet above the main food court area beneath the centre's



glass canopy roof. As its raison d'etre was to act as a barrier against heat problems caused by the sun streaming through, the steel structure was covered with a translucent white skin. It then seemed natural to make a feature of the gondola and so WLN installed a mix of lighting and neon/cold cathode tubes controlled by a Strand Premiere dimming system programmed with a sequence of patterns, chases and fade effects. Set alongside were many thousands of fibre optic tails wired to projectors within the gondola, again fed by the Premiere and an LD90 via a binary code interface.

NEWS Shorts

France's top rental company has ordered a double helping of Soundcraft's new sound reinforcement consoles. Parisbased Dispatch will be the first PA company in the world to offer the Series Five FOH console, as well as the Series Five Monitor desk.

Tape Techniques has specified Martin EM loudspeakers for installation in their next series of Yates' Wine Lodges. This is part of an entertainment package, including their own Music Manager system, that TTL has been supplying to Yates for the past five years.

Wigwam have purchased a 48-channel Allen & Heath GL4000 mixing console from LMC Audio. Initially, Wigwam off-roaded the GL4000 for Freddy Starr's 40 date UK tour. This paved the way for the board being specified for the Rocky Horror Show tour.

John Hornby Skewes Trade Day

PLASA member John Hornby Skewes & Co Ltd will again be holding a four day 'trade only' show on their four acre site at Leeds between 5th and 8th July. PLASA members who are customers or prospective customers of JHS are welcome to attend this event. The company are distributors of HK Audio products, Kustom amplification, Rapco cables, The Scanner radio microphone system, and a range of JHS pro-audio and PA branded products and accessories. For details contact JHS in Garforth on 0113-286 5381.

LIGHT ENHANCER 200

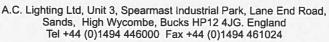
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harmless and due to the size of the particles requires far less fluid than conventional 'Smoke Machines'. Best of all, the Vision Light Enhancer is priced with the budget-conscious in mind.

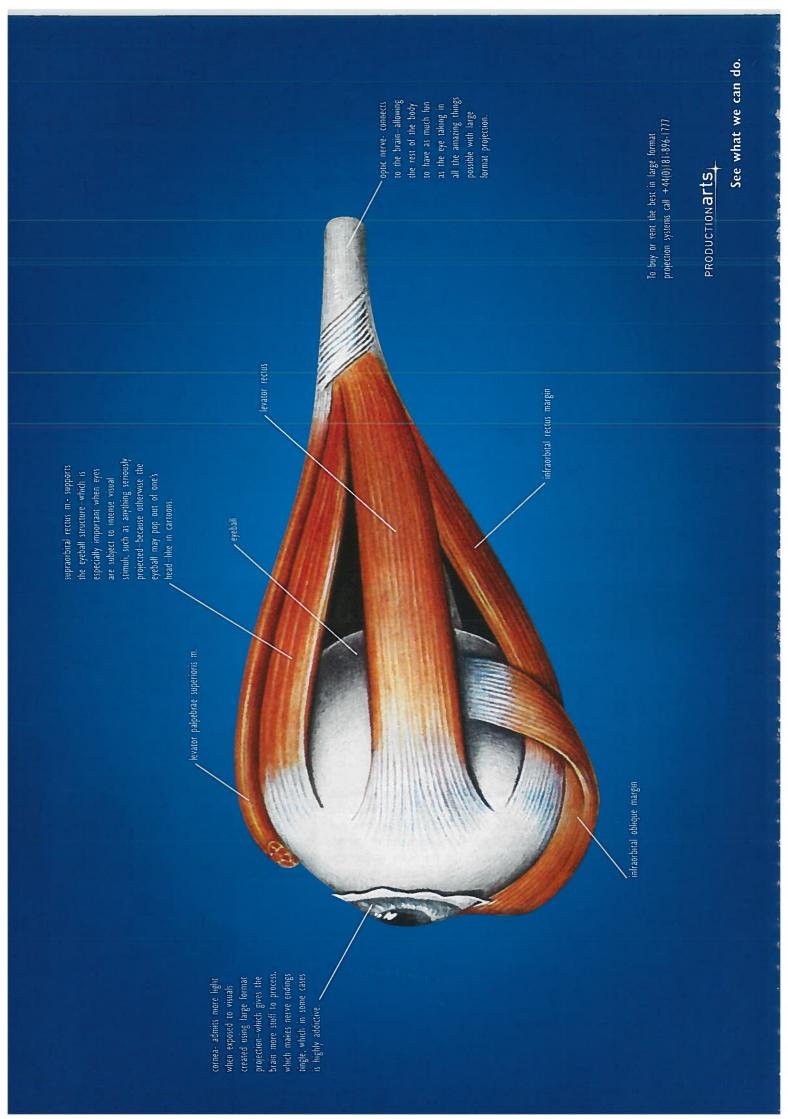
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NEWS IN LIGHTING+SOUND INTERNATIONAL

London Opening for Award-Winning Show Boat



The London opening of the award-winning Broadway musical *Show Boat* took place on Tuesday 28th April 1998, at The Prince Edward Theatre, following hard on the heels of the Australian premiere on 7th April in Sydney. Claimed to be one of the most famous musicals of all time, Hal Prince's production incorporates elements from the musical's many scripts and film adaptations over the years, creating a refreshing result which has already won some 26 major awards on Broadway.

Involving some 15 truck loads of equipment, including over 500 costumes and the 40' x 25' high 'Cotton Blossom' floating theatre, the London show cast is led by top-flight Broadway star George Grizzard as Cap'n Andy, with Carole Shelley as Parthy. Jerome Kern's wide-ranging score encompasses a huge cross-section of musical styles, including gospel, opera, blues, ragtime and jazz - echoing its original roots, from when it was first staged in 1927.

Since L+SI first covered *Show Boat* when it opened on Broadway in April '94, things have moved on a touch. The show's lighting rig, supplied by Theatre Projects/Vari-Lite, now includes 350 Source Fours and Source Four Pars, 60 Wybron Coloram scrollers and 30 double rotating gobo holders from DHA, controlled via a Strand Light Palette 90 desk. The Vari*Lite element, controlled from a Mini Artisan, included nine VL2B and seven VL2C spot luminaires and 20 VL5 wash luminaires. Four Lycian followspots - two Starklight 1200s in the boxes and two short-throw HTI 400s on-stage - are also used, along with two Colour Art 2kW Xenon followspots front-of-house. Lighting designer Richard Pilbrow saw the brief as a rich challenge indeed. "I wanted to avoid a sentimental revival of an old musical and to create a realistic evocation of the past," Pilbrow told L+SI. To achieve this he turned to the very best in stage technology. *Show Boat* has the first ever 'Pitcher' - a 40ft wall of light provided by eight DHA Light Curtains, which change colour and move across the stage, evoking the movement of the sun across the sky.

For the audio element, *Show Boat* also features a 79-input Cadac J-Type Live production console, with a 14 x 28 matrix. The sound design is by Martin Levan and the sound equipment has been supplied by London's Autograph Sound Recording.

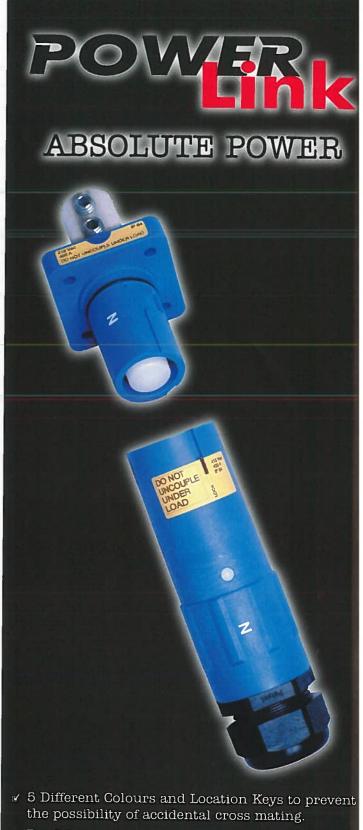
photo: David Cooper

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Second Take . .

John Watt's view from beside the camera

ays were when I lit nothing but drama. Now it's difficult to find any drama on tape and even harder to find any shot multi-camera, the exception being the soaps which seem to me to confound the exponents of 'shoot a shot at a time' and, on the whole, are pretty good. Sometimes a single camera technique merely ensures that the shots neither match pictorially or continuity-wise, but I had better not get on that hobby-horse again! It's particularly galling, therefore, for a Luddite like me to find that, on occasions, the results from a single film camera are rather good.

have been watching Kavanagh QC and, in my book, the photography by Rex Maidment is stunning. A recent episode was set in 'a North East fishing town' (unnamed, but actually Whitby), and looked terrific from start to finish, with some particularly evocative night shots around the harbour and Abbey. I would be interested to know how the essential 'moonlight' was positioned; it looked beyond the reach of even a big cherrypicker. Anyway, this series is a must for me to get my regular 'fix' of photography and remind me, if I need reminding, of the importance of the picture makers to the telling of a good yarn.

I know the location was Whitby because I too shot an episode of something or other unremarkable there a while back, and whilst I promised my long-suffering readers and myself not to reminisce, this is strictly in the interests of education. As someone cleverer than me once said 'learn from the mistakes of others, then you can go out and make original mistakes of your own'.

o, lesson one concerns respect for one's elders and betters. We were to start shooting on the fish quay when it was at its most active - around 4am - and we lingered far too long in the bar the night before. However, I did have enough of my wits left to fix an early call and to decline breakfast in the room. So I was a bit surprised by the arrival at 3.30am of a man bearing a full English breakfast on a tray. 'I didn't order a breakfast,' says a befuddled JW. 'Yes you did,' says the waiter. 'I definitely didn't', I insist. 'You did' he says, and sensing a

problem over the bill, not to mention his tip, adds 'with respect sir, you were in no position to know what you were ordering last night.'

In the knowledge that 'last night' was only three hours ago and anyway the company were paying, I gave in and said 'just stick it on the dressing table' which he did before departing, disgruntled and tipless. As I showered and shaved I began to think that maybe I could manage a rasher of bacon and so started to pick at it. Ten minutes later only half a tomato remained when I became aware of the beginnings of World War III in the next room.

Therein resided my director, an Australian blessed with all that subtle old world charm that has seen later generations guiding Sky TV to its current domination of the arts. He had been looking forward to a full English breakfast. 'Where's me goddam breakfast you Pommy B****** was, I think, the gist of what he was saying. I've only just learned (and remember you heard it here first) that the Aussie accent is an evolutionary attribute now in the genes, brought about by generations talking with their mouths closed to keep the flies out. So, the lesson is don't swipe the director's breakfast if you want a stress-free day.

nyway, we shot some atmospheric stuff amongst several ship-loads of fresh fish without getting electrocuted, which was something of a miracle given that this was a DC job with the distribution being through wooden 'HI boxes, Spiders and Kliegls'. If this means nothing to you, wonder only at the insulation properties of Wellington boots and the strength of sparks who shouldered two 50ft rolls of single 'point two' and connected up in two inches of salt water. The image of all those boxes of fish has stood me in good stead ever since. Whenever I'm at a production meeting and get to the point where I table the cost estimates for the lighting, the production manager and three accountants across the table let their jaws drop and their eyes go glazed and unblinking. At least I know they're fresh, and can console myself that there are plenty more of them in the sea. As for the one that got away, well, I have up to now!

esson two is something to do with having eyes in the back of your head. We are still in Whitby and attempting the near impossible, where the actors have to walk and talk at the same time. Mind you, we struggled a bit too in those low-tech days. The camera went on a vintage dolly which had pneumatic tyres on 20" wheels. Cable bashers (we all started as cable bashers, a noble profession) kept a couple of hundred yards of cable figure-eighted as we pulled back.

Now, I filled in with a Super Brute on a desert dolly mounted on a Molivator and the rough idea was that being just astern of the camera we should pull back at the same speed as our cable bashers, trying not to get in too much of a tangle with the camera cable, and the sound bloke would have to fend for himself (never give a sucker an even chance!) We were in an alley about 10ft wide, shops down one side, sea wall on the other. Those big cables took some handling and everyone tried to watch the camera and Brute dolly with one eye and the ever-increasing bird's nest of tripe with the other.

The barbers hadn't assumed any significance on the recce, and neither had its traditional badge of office, a 10ft stripey pole sticking out of the front of the building! It wasn't that its descent slowed our convoy's progress - it sheared off quite neatly with a sharp snapping noise - but it was the last straw as far as the crew were concerned, they just weren't up to juggling with another item.

esson three is, if you're going to wreck something, try to pick something cheap. As the Genny backed out, anxious to be away and save Lee's another half hour's overtime, he clipped the roof of a nearby Whelk stall, a vivid green wooden structure with a striped canopy, above which it pronounced 'Established 1932, Purveyors of Whelks to the Gentry'. It was a great paint job: in fact, the paint was all that held it together and the gentle touch from our Genny demolished a structure unmoved by half a century of North Sea storms. Luckily, no record remains of the ensuing conversation between JW and the shaken (and I thought lacking in a sense of humour), red-faced man standing next to a steaming boiler, surrounded by a couple of hundred-weight of tongue-and-groove.

alking of picture makers, two more 'staffers' have become freelance recently, though why I mention it I don't know since they will inevitably nick some of the jobs that I want. One is ex-BBC Rod Litherland, whose career has embraced everything the Beeb could throw at him including some memorable drama. The other is Peter Hardman, an old colleague of mine from YTV who was the main cause of me leaving there as he had the LE department sewn up and I never graduated beyond Stars on Sunday as a result. You can destroy the photographs of Vernon Lawrence now Peter!





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ON TOUR

by STEVE MOLES

AND PRODUCTION NEWS

Spice Girls

NEC Arena, Birmingham

LD: Peter Barnes
SD: Mike Dolling

Now this might be a kids' show, but it's all about adult content, and I don't mean the coy teaser sung in the apparent nude behind reversed seat backs. From every member of the production team, to the performance from the girls themselves, it's apparent they all take this very seriously. The professional approach is not a mantra they recite like victims of the Mandelson kiss - there's a unique element to this show that keeps all participants fully engaged.

The phenomena of bands and singers that target the kids' market fall roughly into two types - you get solo artists like Peter Andre, or bands like 911 and BSB. In the band sector, the image and presentation strategy is amorphous: the band exist as an entity without focus and present an image at the expense of personality. The only exception to this might be Boyzone, where Ronan Keating has a distinctive voice - and the strength of character to back it - that has made him a star. Either way the focus is either individual or group.

The Spice Girls, uniquely, are five individuals in their own right. From the outset they have all been sold as such. Thus, when you put them on stage it's akin to having Bowie, Jagger, McCartney, Bono and Sting on stage simultaneously for two hours. This presents some unusual demands.

VIDEO

In the same way the girls are on equal billing, so too the three major presentation technologies of lighting, sound and video. This is the first time I've seen a conscious effort to make video take a balanced 33.3% role in the show. That's a purely subjective analysis of course - in terms of gear it's little different from other arena shows, but the craft of what's on screen is finely tuned to the performance.

Provided by PSL, the system comprises a three screen presentation, a projected image either side of stage from Barco 9200s and a new LED screen subcontracted from XL stage centre. (This is not yet another contender to the burgeoning LED screen market - XL is a Belgian company spawned from the loins of Lorimage who provided much of the technology for U2's monster screen.) All the screens receive individual feeds, although for much of the time the two outers are matched to one another, the decision of what goes where, and when, being determined by director Blue Leach.

"What's shown is a combination of VT and live footage: the video footage is stored on Flamingo Digital Systems' hard disk and fired by the ever popular Dataton switching software which, in turn, receives its trigger via MIDI from the keyboard player on stage. That was probably the hardest part," reported PSL system engineer Richard Burford. "Getting the thing programmed so everything comes at exactly the right moment."



That need for accuracy was reinforced by Leach: "In any song, the girls all take separate lines on the lead vocal, and their audience know every change so you have to make sure you've put the right face on screen at the right time."

It's astonishing to watch, and a tad spooky, but the little girls in the audience have the whole thing down pat. All those dressed like Baby Spice only mouth the words when the real Baby sings, and they know exactly when Geri makes a big gesture with her arms outstretched in the video, and bang on cue as it appears on screen thousands of little pairs of arms are already beginning to stretch out.

The major challenges for video are to make it big - I hate to say it - but it has to be a full in-vourface show. Leach is more eloquent than his muted apology for using a cliché would indicate. "What I have to do is to take the energy from the audience, and translate that into visual images." Leach has five cameras to draw on - all Sony D30s - one on a jib to stage left, one on a track with a Dutch head for some funky tilt framing, one pedestal in the pit, one hand-held on stage and the fifth FOH with a long lens (this is a show for close-ups; wide shots are not needed). "No two shows are the same and the camera cutting reflects that, but there is a basic format you have to stick to, cutting to each singer as she takes her two lines of the song. There's lots of mixture from the cameras on the inside (stage) screen, with the PVR on the outers. When there's no pre-recorded running, then I try to alternate between three cameras on the three screens so there's never a song where there's no movement."

Leach controls from a Four A vision mixer with a Magic DaVE for DVE effects generation with all PPU and camera facilities also being provided by PSL. The dynamic of what Leach did on screen was spot on, but there were a couple of weak spots outside the realms of his command. The LED screen didn't give perfect colour rendition: for the full bodied or larger framed shots this didn't show, but for close-up head shots, all the girls (with the

exception of Scary) appeared to have sun-burnt faces, something that was patently not the case when I saw them backstage. The second springs from the old adage that going on TV adds pounds to your body. Geri is renowned for her bust, yet in reality is quite normally proportioned and petite, but on screen she looked podgy-faced and decidedly top heavy. It makes her look like a 16-year old - a woman's body, but the puppy fat of an adolescent - and it's quite unflattering. I just wonder, is there a way of processing the image in real time to give a more life-like portrayal?

LIGHTING

In many ways, Peter Barnes has done more here than design the lights and is, in fact, credited as the show producer. It's a title he's a little squeamish about and he's quick to credit Alan Chesters from Hangman who designed the set for example, but there are quite pronounced inputs from him that fall outside the lighting remit. "The set design started with the girls. They wanted a space theme. That's why I chose the circular trusses (trusses you may have seen before on the Smash Hits show last year, where Barnes again availed himself of the services of LSD.) I discussed the space idea with Alan (Chesters) and we continued the curved theme on the set with circular risers."

In fact, the curved theme is ubiquitous, even the banister rails and spindles to each raised platform bend and bow stylishly. Brilliant Stages built the whole thing, and Barnes declares himself well satisfied with the result. There was always a danger of it being too hi-tech looking, but by using a lot of curves it has made it softer, more feminine - something hard to deny when you see it.

Barnes also conceived the dramatic opening. The start of a show is always so important and it is hard to come up with new ideas. What he's ended up with is a nice bit of animated space ship through the universe footage: the craft flies by



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distant planets that materialise into floating Spice CDs with wisps of their songs filtering through the pervading throb of star drive engines for the fleeting moment that we cruise near by them. But his pièce de résistance was securing William Shatner to do the inevitable - "Spice, the final frontier."

Kitsch, crass, clichéd - call it what you like, it's perfect pop idiom, and he secured the famous man's voice so cheap by showing a remarkable amount of brass neck. 'This is how much we have to spend. We're going to make the video clip anyway whether your

voice is on it or not.' Besides, with the tour already selling strongly in the US, it's not going to do Mr Shatner's autumn years any harm.

Lighting-wise, Barnes has felt obliged to be generous to both the dominant UK suppliers, as well as indulgent to Martin Professional. Although LSD are the main contractor, and the primary hard-edged lamp of the rig is the Icon, the moving washlight role is taken by VL5Arcs, and there is fair showing of MAC 500s and 600s. Control is all from an Icon board. What he does with all the different moving sources is paint a lush picture thick, saturated hues in complementary colours, rich mauves and ambers at the deep, metallic, golden end of the range being a good example.

Seen in comparison, I could detect little difference in the output from the MAC 500s to the lcons with the naked eye, but at close range above stage that's hardly surprising. Barnes did point out that the MACs seem to produce a more yellow beam than the Icons when in open white, and that makes them look dimmer, but commended them for their operation and reliability, something that hasn't always been top of the comment list for Martin products on tour.

Two elements of Barnes' lighting and presentation made the show look a million dollars without actually costing too much. The whole stage is enclosed by a huge Austrian drape (mechanism from Triple E) running across the front and wrapped to the sides. Lavishly painted to look like red velour (in fact a red Bolton), with horizontal edging and decorative border detail by Priscilla Samuels, it brings a nice touch of music hall theatricality to the proceedings, something enhanced by the opening to the second half of the show which begins with a real vaudeville, Broadway pastiche.

The other is Barnes' enormous rear truss, all fully loaded with Pars. As he said: "It's only a few extra sections of pre-rig in the truck and some dimmers, but the impact it made in terms of making this look like a wide-screen presentation was dramatic. For my money the best spend of the lighting system." The only other element that might be deemed extravagance is the presence of six Super Troupers front-of-house, not five. But again this underlines the significance of the five star bill. The sixth spot is not for band pick-ups and solos - in fact, the band remain for the most part anonymous in the visual sense - it is a spare in case a bulb should blow. With any other band, this would not be an issue, here it's crucial.

And there's no doubting that same crucial





Blue Leach, video director at the PSL PPU.

SOUND

element in the audio, all five girls have double radio mic systems, and a pair of Shure PSM600 In Ear monitors each. But belt and braces safety aside, the main challenge for Mike Dolling FOH and Graham Blake on monitors is just how busy the show is. Dolling echoed Leach in referring to the demands a five girl show presents: "Not only do we have five lead vocalists, constantly changing from one to another, but when they're not taking lead they're on harmonies. Switching between them is the one factor I wouldn't automate, but it's safe with the rest."

And that's as true for Blake as well. Not only does Dolling exploit the facility of his Langley Recall to subordinate many functions, but both FOH and up on stage appear littered with Yamaha O2Rs and O3Ds. "For Dolling, the O3D takes care of the band mix, leaving me free to concentrate on the Recall for the vocals." This might not seem much at first glance - there's only six musicians up there, but he receives 52 inputs from them, some already mixed down at the stage end and there is a staggering 6.5 tons of back-line gear on the tour.

Musically, it has to be worth it: an assembly of giging session men they may be, but this is a very tight group who play as a band and who deliver polish with every note. Dolling uses a d&b 402 system from Wigwam (who also supplied all the control electronics, including the multitude of Yamaha desks) and when the band fall into a groove of pure funk you get to hear just how an arena system should perform. There's no excessive level to speak of on stage, the musicians have a modest array of Firehouse wedges and Nexo PS10s and 15s for monitors, the 402 side fills putting a general mix across the front, while in the house you're presented with a thick, textured mix that allows rhythm and melody to sit comfortably alongside vocals.

This is significant: whatever the enormous strides the girls have made in vocal performance since they decided to go live, none of them is Heather Small. Their vocals are characterised by that light, dare I say it, 'girlie' sound. There's tone and musicality, but no real power. To be able to lay them gently in amongst what is a well trowelled big band sound, and not have them sound thin, lost or reedy amidst a more powerful force is a considerable achievement of balance and speaker fidelity. One piece of new technology being supplied by Wigwam on this tour is the d&b RIB system (Remote Interface Bridge) which allows Dolling to remotely zone his flown array: "In most arenas the throw of the system is long enough that I don't need a delay system. The RIB is helpful because it gives a visual indication of amplifier control to all the zones we've created. With it I can make adjustments during the show, though generally I don't."

Dolling also received a demo model Sabine Feedback Exterminator when the tour arrived in Birmingham, and after just three shows he's a convert. "It's cleaner and warmer - I can just take notches off the low end. When I'm fighting for gain, it's so accurate and quick. Because it's got built-in graphic and delay, I'm going to use it to replace my delay rack (yes, he does use it sometimes) which will give me a cleaner signal path, something I also find of benefit from using the on-board dynamics of the Recall."

Dolling initially used Beta 87s for vocal mics (the tour is sponsored by Shure): "I chose the 87s because I thought I'd need that kind of potential, but, in fact, they sing so well I was able to switch to Beta 58As which is a blessing as they're not so open. Dolling also admitted to coaching the girls on technique - something they quite readily took on board, never wandering off mic at any time, and they do some pretty strenuous stuff up there. On this particular occasion, Mark Ballard actually ran the show, Dolling being trapped in a Radio One truck for a rehearsal of a live recording the following night. On monitors Graham Blake uses a Midas XL3 in addition to a Yamaha O2R to control everything for the girls. "Each girl requires something different on each part of the song. Therefore, the board I wanted had to be capable of setting up scenes: at least three scenes per song - verse, bridge, chorus - for all 21 songs. The other advantage is that the board is relatively small. The girls do an enormous amount of personal appearances between shows, where they perform one or two songs. They appeared on a recent TFI Friday, for example, so we just pick up the two radio racks, mics and In Ears, the O2R and away

It's a lovely show. There's plenty for everyone, including the long-suffering mums and dads in the audience, and don't scoff, without them there'd be no-one to buy the tickets, hence my reference to a very adult show in the opening. Barnes summed the whole thing up nicely: "There's a lot going on up there, it's a very dynamic show. A lot of effort has gone into all departments, the dancers, set, video, costumes (nine changes in two hours), sound - everything.

"The girls are very professional - they come in and sound check every day, and as with today for example, we're two months into the tour now, but they're still working on a development in a dance routine. When you start your performing career on a monster stage in Istanbul, it's hard to keep raising standards from that level, but they do."

photos: Phil Dent

The Boys

NEC Arena, Birmingham

LD: Scott Phillips SD: Ron Loccarini

It's a sometimes voiced complaint of this magazine that the concert reviews lack critical bite. There are reasons for adopting this generally positive stance, reasons most readers will be aware of, but on this occasion I have to say, this show was complete and utter rubbish.

There are two observations to temper the mind when denouncing something

so heartily - one positive, one negative. Whatever the lack of artistic integrity, this act is filling the arenas at a time when there's a singular dearth of other bands to do likewise. However, the value of the live experience is diminished by such blatantly contrived content. Will these girls want to come back for more in a couple of years time when they're more discerning? A worry.

Having seen Boyzone, Take That, Peter Andre and recently 911, Backstreet Boys have no redeeming features whatsoever. The music is a rehash of Tamla - the dancing is predictable, and the contrived manipulation of teen emotion is just too easy. To balance this, the dogged commitment of the production team - lighting, sound and video - was commendable. They all talked the talk, no matter how weary of it.

LIGHTING

Like much of the production, the provider of the lighting for this show, both in design and equipment terms, will be unknown to most readers. Based in Regina, Saskatchewan, Premier Global Productions (what a modest and unassuming name) are the main contractor with Focus of Montreal supplying the automated fixtures. PGP's contribution features what look like brand new sections of Tomcat pre-rig filled with chrome Pars, plus ETC's latest 2.4kW digital dimmers, while Focus provide the new Martin MAC 500, as well as 600s and Robocolor 400s.



Design is by Scott Phillips, a Montreal-based freelancer who's been with 'The Boys' (to use the tour familiar) since late 96. Unfatigued, Phillips remains an enthusiast: "My design was originally built for open-air sheds, that's why it might be a little small for in here. But it still looks good - I might just add a moving element sometime soon."

But Phillip's rig is by no means small; there are 42 six-lamp bars spread over the stage, 17 fourlamp ACLs, and another 20 circuits of ACLs within elements of the set. Verging on the heavy metal in dimension, Phillips held back much of what he had, his Avolites QM Diamond rarely being asked to raise more than 30kW at a time, generally sticking to a single colour wash textured with white, leaving the dynamics to the MAC system. His accents with ACLs, audience blinders (Molefay) and the odd flourish of Dataflash were cue perfect, but the overall stage look was dim. Vincent Colbert from Focus operated the MAC system from a Compulite Animator, and declared the new MAC 500s sound. "For their size they're a good lamp, but not as bright as a 1200 and it's a shame there's no full colour mixing, but they are reliable, and because of their size, fast."

Unfortunately, much of his work was obscured by two large video screens hung in tandem right across the front of stage. The desire not to wash out the screens from behind may, in part, be why Phillips was so restrained, but it was a compromise poorly made. With a roof trim as low as the NEC's, the screens should have been nixed.

SOUND

The PA - a JBL HLA system - was supplied by Vari-Lite Inc's latest acquisition, EML, from Belgium. The main audio contractor is Canadian company, Bruit Blue, who also provide an HLA for The Boys' North American tours. The house mixer was Ron Loccarini, a Texas-based engineer who has, in his time, mixed for Luther Vandross, and more recently En Vogue. Having experienced both PA suppliers, Loccarini was flattering about his Belgian team: "I'm real happy with the personnel here, and I like the system. It has real power."

And it's in the power area where Loccarini has to do all his work: "The real issue is getting heard and system fidelity - the only answer is power." But he's battling against almost insurmountable odds; at the NEC the adolescent screaming was tortuous. To get the vocals and much of the band anything like audible required levels around 128dB, and transients way above that. In such volatile conditions with so much volume coming from the house, and running the mix so close to critical, it was difficult to discern what was actually happening, something Loccarini addressed by using his own set of In Ears, delayed to the system. With an imperative to find the vocals, particularly lead, Loccarini used his Midas XL4 to switch lead into a dedicated VCA group master already 'up' for the job.

This should have worked, but The Boys either couldn't sing or didn't have the wind left to project their voices, leaving Loccarini scrabbling for input gain which, on at least two occasions, saw the vocal mic lift off into a sustained howl. This was no reflection on Loccarini: "You cain't present what ain't there," as they say in Texas, and to his credit he persevered throughout the performance. (Can't speak for the encores, curiously I felt compelled to leave.).

VIDEO

As previously mentioned, video took more from this show than it put in. Again a foreigner to our shores, the video elements (both projectors and cameras) came from IMAG (Image MAGnification) based in Tennessee and Arizona. The video consisted entirely of live footage, with one rostrum camera FOH and two hand-helds on stage, all JVC equipment. The projection was onto four screens with a Barco 9200 on each, flown from 'T'-truss configurations that support both screen and projector, much like those that Blitz have installed around the UK arena circuit.

There was, for reasons hard to justify, a roll-down fifth screen positioned up-stage centre. As was stated earlier, the two screens across the front of stage should not have been used, for they obscured much of the rig and screen five completely, but director James Thweatt did have his reasons: "We opened in Dublin yesterday and couldn't put up the full system, so this is our first opportunity to run the whole thing up." And with Wembley the next day . . . well maybe he had a point?

However, despite the restraint exhibited by Phillips, the front screen images were still washed out and black backing for the screens wouldn't go amiss. Besides, the only person actually watching the video was Thweatt. I know this because, like a true professional, I retired to the bar to rest my ears for three 'songs', and asked the many excited young girls headed towards the loos what they thought of the video? "What video?" was the consistent reply. What band? might be more apt.



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THE REAL THING

Ian Herbert visits the Teatro Real in Madrid - a Venue with a History every bit as dramatic as some of the Operas it stages



The closing scene from Nicolas Joel's 1992 Ballo in Maschera, from the Opera Bastille in Paris, restaged by the Teatro Real's Eric Vigié.

Standing at the gates of King Juan Carlos's palace in Madrid, you look back across a fine, formal square of box trees and hedges to the main facade of the Teatro Real, Madrid's new old opera house. It's an impressive vista, and of course the view back from the theatre is equally impressive. Last time I visited, five years ago, both the square and the opera house were building sites. Now restored, they glow in the spring sunshine.

The history of the Teatro Real is a rocky one. There have been lyric theatres on the site since the beginning of the eighteenth century, and the present building was planned as long ago as 1818. A series of hold-ups meant that the theatre still wasn't ready in 1850, at which point the then King stepped in and decreed that the Teatro del Oriente, as it was known, had better be completed or else. Five months later, it opened as the Teatro Real.

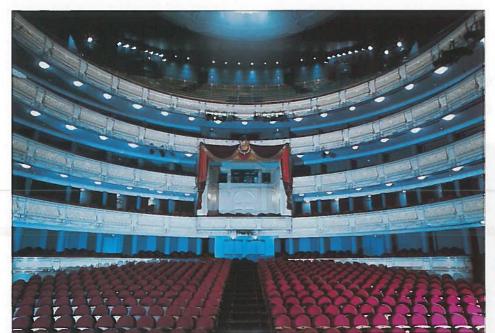
It had a life of 75 years as an opera house, welcoming Verdi in 1863 and Diaghilev's Ballets Russes in 1916-17. In 1925, however, it was found to be seriously in need of repair, condemned as unsafe, and didn't reopen until 1966, having been converted in the space of a year by the architect José Manuel González-Valcárcel into a concert hall. And a very good concert hall it proved.

Twenty years later, planning started to restore it to opera use. In 1988 the orchestras moved out and in 1991 the builders moved in. Their budget was just under 20 million pesetas. Plenty of continuity here: the architect and the construction company were those who had seen to the 1966 conversion. Things didn't move so quickly this time, however, and with the first two of the conversion's three phases completed, in January 1992 the unfortunate Senor González-Valcárcel dropped dead in the building, victim of a heart attack. A new architect, Francisco Rodríguez de Partearroyo, devised a revised third phase, and finally in October 1997 the Teatro Real reopened with a programme of Falla, The Three Cornered Hat and La Vida Breve.

It's been worth the wait. Madrid now has a world-class 1,600-seater opera house with the most modern stage machinery, which has yet retained much of its elegant nineteenth century atmosphere. To achieve this, some 13,000 truckloads of material were removed from the theatre as part of the first demolition process before the new stage house could be built. Stage and fly-tower were completely gutted and built again from scratch, while the auditorium and external facades were the subject of major restoration work.

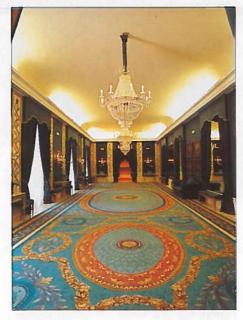
The Teatro Real now sits on its island site, a little like the much smaller Estates Theatre in Prague, with good access at either facade but narrow streets on each side. In the technical and administrative part of the building, which remains almost completely invisible to the visiting general public, these two streets are the points of reference on the many neat signs orienting the backstage visitor. Cool blues and minimal decoration are the hallmark of the private corridors. Of the theatre's levels. administration and management staff occupy the ground, first and basement floors; technical staff are on the fourth, wigs, make-up and wardrobe on the fifth, while floors six and eight contain spacious new rehearsal studios for choir, soloists, dancers and orchestra. The upper floor has been gained by building a new zinc-titanium roof (a clever design solution by the new architectural team which harmonises well with the lead roofs of the palace opposite) around the new air-conditioning installation. Many of these working rooms benefit from stunning views of the palace, or the Plaza Isabel II at the back.

It's from the Plaza Isabel II that trucks can arrive and deliver their containers of scenery and costumes directly into the loading dock, which is equipped with heavy lifts to bring



Above, the impressive auditorium which seats over 1600. Below left, the gallery bar area, below right, the level 2 reception room and bottom, the restaurant with the Madrid night sky over the central area.







material down to the workshop floor or straight on to the rear stage area. The stage machinery of the Real, installed by the Austrian companies UTE Waagner-Birò and Thyssen Bötticher, is state-of-the-art and uses a rotating 'water-wheel' principle which allows up to six different sets at a time to be assembled and put on stage. Eighteen platforms can move in the horizontal plane, and six of those tilt. Six more move vertically. Two further lifts, which use the space-saving Canadian Spiralift system, can vary the height and size of the orchestra pit, with the possibility of bringing it up to stage level in two pros-width sections.

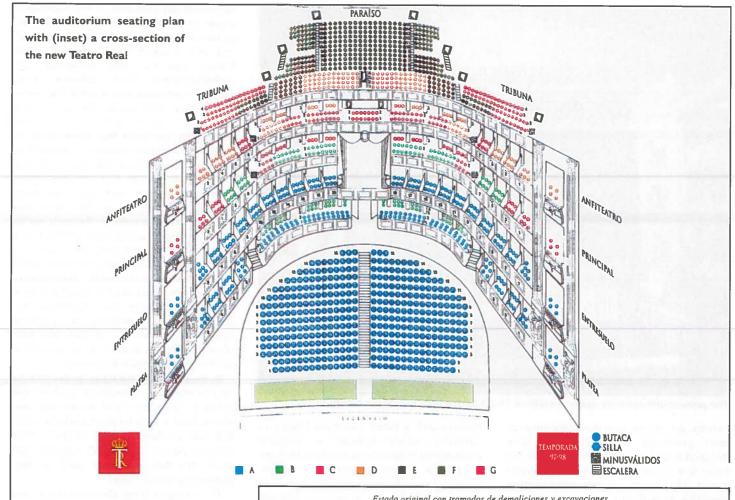
Like the stages, the flying system is fully automatic. Its 60 or so bars are controlled by a single operator from a similar desk at fly-tower level to the one at stage left that works the stages. Monitors indicate the position of what has been hung and can be programmed to show visually the speed of their movement. The principle of locking several fly-bars together for operation, or moving them at variable speeds, leads to an action very much like that of a lighting board.

The lighting board itself gets pride of place out front, in the Royal Box. Before you LDs get too excited, I should explain that the box is a huge affair which dominates the auditorium and extends over two of the house's four balconies. LX people have their own hutch on the upper balcony, and there's another control room above that which (I think) houses projection equipment for surtitles and the like. Each balcony has a discreet bar all round for hanging lanterns - when I saw the hall in action the FOH lighting (mostly supplied by ADB) was restricted to side and central positions on the top two, plus some floods from the four ceiling positions, which open like the headlights of a sports car after the house lights have gone down.

The auditorium has been remodelled to echo its look in an earlier period, and the impression you take away will depend on whether you are in the pit or on one of the upper levels. From below, you look up at cream balconies, discreetly gilded, and a simple pros opening framed by cream boxes. Above the four tiers of mixed boxes (at the sides) and seating rows (nearer the centre), rise 15 rows of gallery seating, four of them encircling as slips. These sit against a steel-gray colour scheme which is continued up into the ceiling, a subdued recreation of the 1850 ceiling, its selfeffacing background role broken only by the original chandelier, all 2fi tons of it superbly refurbished at the Royal Glass Factory (Fabrica de la Granja). The chandelier can be raised and lowered to suit the sightline needs of the gallery-goers. (The gallery in Spanish, as in French, is called 'Paradise' - The Gods, of course.)

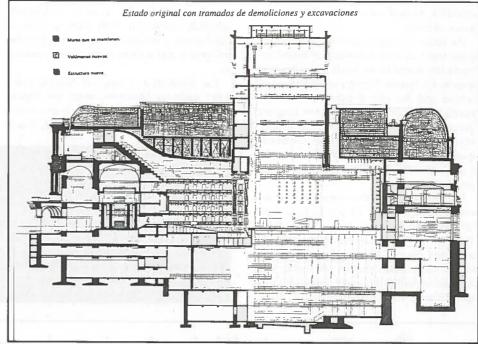
From above, you will take more note of the red velvet covering the front rails of the balconies, the red of the seats themselves, and the rich cedar floor (newly laid to give a better rake) in the pit, giving a warmer, more traditional opera-house feel to the hall. You'll notice this same warmth as you enter the auditorium, for the connecting doors and walls of the inner shell are all in the same rich cedar, with bronze fittings.

This is a motif which is carried through from



the main entrance foyer, a new solution to access - and to the limited depth of the foyer area - which reflects the classless tendencies of today's theatre buildings. Although there is a side entrance which leads to one of the theatre's six public elevators (all with burnished bronze interiors), everyone may enter from the main street doors, which are flanked by the box office on one side and a well-stocked book and record shop on the other, into the foyer. From there, massive cedar columns with bronze capitals and bases rise to gallery level where they support an elliptical cedar architrave, a leaning-shelf from which gallerygoers can gaze down at the posers from the pit. They will also hardly fail to note the foyer's violent green carpet, one of a series of carpets for the public areas produced by the firm of Moron (sic) which go well over the top in their garishness of colour.

I'm afraid the word 'garish', rather than 'sumptuous' (which they also are) came to mind pretty regularly in my tour of the public areas of the Teatro Real. Some of them are reasonably restrained - the gallery level bar and promenading area above the foyer is quiet and pleasant, with a fine view of the palace, but all the decorative restraint of the auditorium is cast aside in the rooms which surround the entire building on level two to make a chain of grandiose assembly and eating/drinking places for the opera's in crowd. They have been hung, in several instances, with fine paintings and tapestries from the theatre's own collection as well as those of galleries including the Prado. In the Royal Salon, the centrepiece is a portrait



which the uninformed overseas visitor may take to be that of Juan Moreno Aguado, whose name appears below it. It is in fact a portrait by Sr Moreno of Juan Carlos I.

Reaching the Plaza Isabel end of the theatre on your stroll around this level, you come to the theatre's restaurant, 500sq.m of space which used to be used for grand balls and which has been decorated with the same, shall we say, 'exuberance' that characterises the other rooms. The main ceiling is a deep winered, rather blotchy at present - which may indicate an attempt at trendy ragging or may simply mean that it needs a second coat of paint. In the centre, where an enclosed area is

marked off for dining, is the restaurant's pièce de résistance, a sky-cloth complete with 630 fibre-optic lights showing not just a designer's idea of the firmament, but a faithful representation of the Madrid night sky. This does seem to be going a bit far - I wonder how many of the happy diners will look up from their caviare sarnies to identify the Great Bear?

Around the restaurant, some of the gilded plaster ornaments from the theatre's old boxes have been incorporated as decorative elements, and there are display cases showing costumes from the wardrobe. Bars at each end cater for interval thirst. With the side salons, the whole floor offers ample space for opera-goers



The proscenium opening spans a width of 14.5-18.6m with a maximum height of 14m.

to relax, see and be seen during the interval. More practically, the rooms have been designed to be let out for functions when the house is not in use for performance, although ! wasn't able to work out how some of them would be divided off to cope with separate

The titular management of the Teatro Real is in the hands of a mixed-economy board, the Fundacion Teatro Lirico, made up of its prime funders, the Spanish Ministry of Education and Culture and the city of Madrid, as well as representatives of industry, with the King and Queen as its honorary presidents. The theatre's artistic and musical director, the celebrated Spanish conductor Garcia Navarro, works day to day under the direction of general manager Juan Roca.

The programme for the opening season is a sensible combination of productions from European and American houses (including a visit from the Royal Ballet and a staging of a favourite Covent Garden warhorse, Turandot) with a respectable number of Teatro Real originals, including the world premieres of an operatic adaptation of Valle Inclan's Divinas Palabras and a ballet based on Rojas's La Celestina, which indicate a welcome commitment to Spain's own cultural heritage. An average of nine performances a month, including recitals and concerts, has been programmed for the season, a leisurely schedule compared with that of Covent Garden but a reasonable number to test the equipment and services in this time of running

The production I saw was Nicolas Joel's 1992 Ballo in Maschera, from the Opera Bastille in Paris, restaged by the Teatro Real's Eric Vigié. A thoroughly decent staging, this, if somewhat old-fashioned in the tradition of singers' rather than actors' opera, which didn't go down all that well with the Madrid critics and even evoked some extremely polite booing from its highly respectful, very undemonstrative local audience. Carlo Tommasi's sets were monumental, built rather than flown, and made full use of the waterwheel stages to bring on their different scenes with minimum fuss. Unobtrusive TV cameras were in the auditorium, in preparation for a live telecast later, but they surely had nothing to do with the over-restrained lighting levels set by designer Albert Faura. Not a single followspot in sight meant that there were moments when - amazingly - the tenor was flat out downstage on a major aria with his face in shadow. This seemed to be too much of a gesture to naturalism in a production which hardly set out to be naturalistic. The orchestra, small enough to be placed in the pit in front of the stage, came over with a fine clarity. The fitting out of the auditorium was apparently made with an eye to increasing the hall's reverberation time from 1.2 to 1.6 seconds, to suit the greater resonances of opera.

By the time of my backstage guided tour the next morning, the orchestra pit had been fully raised to stage level and scenic staff were already hard at work on Bob Crowley's sets for the next production, Nick Hytner's 1995 Chatelet version of Janacek's Cunning Little Vixen. The Ballo sets were safely on their platforms under the stage.

The strangest thing about touring a new house is to find it so clean - no old flats lying around the corridors, no graffiti on the cue desk, no chipped cups in the scrubbed, functional staff canteen. The patina of experience that gives a theatre its lasting character will come later. Meanwhile, the Teatro Real is, well, a real pleasure to visit, be it as audience member or semi-technical tourist.

TECHNICAL SPECIFICATION

Proscenium opening: width 14.5 - 18.6m - maximum height 14m

Stage: 18m high by 24m Stage area: 1430m=

Lighting board: AVAB Super Viking 1536 channels

Lanterns: supplied by ADB (760), Thomas (240), Strand (220),

specialist lanterns by Robert Juliat (followspots), Rosco, White Light, Strand, Desisti,

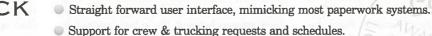
Pani, Diafora and Strong.

Sound: Cadac Type J 32-channel; Soundcraft 16-8-2

Slide projectors: Hardware Xenon

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SHOW OF STRENGTH

Steve Moles attends powerhouse::uk - a major exhibition exploring new ways of living and working which aims to capture the essence of contemporary British design



This is an exhibition that has been routinely dismissed in the press, yet it is curiously engaging. For their part, the media largely fixated on the fencing that surrounds the powerhouse::uk on Horseguards Parade. Well OK, it looks ugly and in view of the thronging hordes of at least 200 visitors an hour I have to agree, it's totally unnecessary. But they harped on about this to the exclusion of the contents. This is 'a major exhibition exploring new ways of living and working' trumpets the press pack; more prosaically it looks at the way design and creativity touch us all at the humdrum level of human existence. But it is a celebration of how Britain contributes to this area, and as such it's open to attack: in an age where we've all done that, been there, and eaten the pie, what is there left to see and do? We all now own cars that can be safely driven at 100 mph, why should we get excited about something as mundane as a vacuum cleaner? Well nobody buys a Dyson because it's a good suck - we take that as a given - why they sell is because they look funky and every time we drag them out from the cupboard under the stairs we get a little frisson of excitement. It's like the man on the train who flips open his laptop, plugs it into the mobile and e-mails his dealer in Caracas - even Mrs Mop gets to play James Bond these days, and it's a lot of fun.

To start at the beginning, the temporary structure that houses the exhibition is an exhibit itself. Designed by Branson Coates (Nigel Coates the interiors, his partner Doug Branson the exterior structure), it's a quasi-inflatable version of what the National Pop Music Centre (also a Branson Coates design) will look like. Four silvery cylinders arranged in

a quadrant with a faint nod in the direction of a drum kit.. By daylight it's eye-catching for a millisecond, but then it quickly reverts to a rather amorphous blob that looks all the more incongruous positioned where it is. By night it's magical. Surrounded by 32 Eurofloods fitted with a glass gel that approaches real UV, the structure hovers just above ground level and simmers in that indistinct way UV does. A spacecraft has landed in Number 10's back garden - perhaps Tony's going home (sorry).

The lights were put there by David Atkinson (see L+SI In Profile, March 1998). "I was approached by HP. ICM to light the project in late January, with the show opening April 4th, and at the time I was approached little of the content was settled. It was a bit tight to say the least."

Lucky for him the four spaces inside are of equal size and he was thus able to construe four generic lighting themes that could be tailored more closely to content as the exhibit took shape. What's fun about this show, from an L+SI point of view, is the fact that lighting the exhibit is not a simple function of placing objects in 'their best light'. Without some lighting drama this show could be as dry as cardboard. Arbitrarily, the first hall is 'Learning' - a room full of phosphorescent greenhouses (you can work out the metaphor). Lighting is mostly suspended from a purpose-built circular truss provided by Elstree-based Illuminations. who sourced much of the lighting fixtures and control for the project, including the Source 4s, MAC 500s and the Jands Event console, from Playlight's London office.

In this room, there's nothing more exciting hanging from the truss than a bunch of Source

4 Pars and Profiles, but the trick is in the use. The greenhouses glow because they all have a turquoise photo-luminescent tape (supplied by Howard Eaton Lighting Ltd) applied to their extremities defining their outline. On a complete aside, if you haven't seen this stuff before, check it out - it's the dog's bxxxxxxx. Possibly the most exciting thing since a bunch of Texan sound engineers got bored and started playing with motors and lights. Carve your girlfriend's name in a strip (it comes like tape), strap it to the windscreen, apply 12v and, hey presto, you've got the funkiest sun visor in town. If it proves durable and comes down in price, you'll see it everywhere.

But back to the powerhouse::uk Exhibition. What Atkinson has done is extend the motif of turquoise wire-frame greenhouses: "I just took a CAD drawing from them, had gobos made up and projected it onto the perimeter walls to give a sense of infinity." He further enhanced the feeling of openness and space by projecting slightly off-focus images of leaves dappling the floor, and the careful application of a slow chase gave the appearance of gentle sunlight through the trees on a breezy day.

The effects are subtle and don't really impress themselves upon you until you emerge back into the central lobby area. Here the tensile fabric skin of the structure is opaque and natural light floods in; the four drums meanwhile are quite dark and you don't realise the impact of the lighting within them until you've visited your first one and re-emerged. I watched from the lobby area for some quarter of an hour and a majority of new visitors departed their first drum, stopped, reflected and went back in for another look.



Creativity in communicating, part of the development of Trade and Industry's exhibition powerhouse:: uk, shows Britain as world leader in using creativity to communicate ideas with a focus on communications media such as advertising, graphic design, packaging and computer games.

The 'Communicating' hall is ringed by a Scalextric track that weaves its way through a cityscape made from product packaging -Habitat, Harvey Nicks - Kit-Kat even. Lighting here is more active and invasive. A hexagon of truss is stood on towers to allow the limited load-bearing capacity of the building to hold three screens for some video projection. (Something repeated in the remaining two rooms). Lighting is more varied - Source 4 profiles again, but also Minuettes and 500W QI linear floods, but the action comes from Martin Professional's MAC 500s. "I wanted to create a night time feel," explained Atkinson, "using stronger, more directed lighting onto the various structures."

The MACs follow the Scalextric black cabs and double deckers about the track, while one projects an incoming Jumbo jet across the skyline. On a technical note, Morgan Evans, Illuminations' on-site technician reports a glitch to watch out for when fitting custom gobos to the MACs. "The Martin gobos are thicker than standard DHA ones, something we discovered when we fitted the Jumbo and it appeared to wander off index. Of course, you try everything until you realise it's just the gobo slipping round inside the holder, but it's easily remedied - a couple of dabs of high temperature silicone does the trick."

The 'Networking' room has at its heart a forest of those transparent globes on sticks that seem to be appearing everywhere - the ones that can write an illuminated message onto their interior surface. Produced by a rapidly rotating strip of LEDs they appear to development of subliminal imaging LED

in the rest of the room: "I've used a 201 correction in all the lamps in this section to isolate the areas between the many screens around its periphery, and I've chosen PC sources because the tighter beam gives me that much more control." His only deviation from this is the ropelight that adorns the actual size Sputnik (an FA regulation football with spikes), but even here he's applied black gaffer tape along its edges to make a more muted statement and control the the output, "and more importantly, to stop it looking like a disco". Room four - 'Lifestyle' - is my favourite and

contains the eponymous Dyson vacuum cleaner beside a host of other British-designed household familiars. Psions for example, that twirl around the room on a jauntily angled conveyor belt like the rings of Saturn. I like the room for the very singular object that is stationary and floor mounted - a Triumph motorcycle - and the single (and only) Par 64 that lights it. Talking of old technology, the room also has projection screens about the walls with images coming from a clutch of Kodak 2050 carousels supplied by Blitz who are also responsible for the other, more sophisticated video LCD projections in the other rooms. "I've used 201 again," said Atkinson, "and because of the screens and the acute angle I needed to downlight onto the conveyor, I've added a linear frost and barndoors."

strip that has adorned Maris Ensing's stand at

PLASA for the last few years. To one side of the

room's entrance stands a structure not unlike a

rustic French public urinal, dappled again in

sunlit leaves. It's interior has yet another

projection surface rubbing shoulders with

information that requires illumination. To avoid washing out the screen, Atkinson has used a

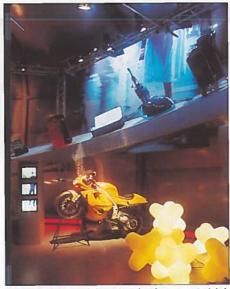
single lamp gelled with CTO to 'heat up' the

yellow-surfaced interior without applying too

much intensity. It's a technique he's continued

The lamps also dip and change on a chase, forcing the viewer to linger, having to work hard to make sure you see everything. "We had a problem with David's slow chases too," reported Evans. "We put in a Jands Event Plus for conventionals and a Scan Commander for the Macs, and we've used a Q Commander from Light Processor the really slow dipless chases David wanted without a slight bump." And in case you were wondering, there are more MACs in both Lifestyle and Networking, again projecting moving gobos, this time onto the floor, creating an obvious pathway to

I'm increasingly impressed by how the DTI are getting behind UK presentation companies and their skills: the objects on display are of course the primary focus of attention at powerhouse::uk, but it would have been easy to present them in a more old-fashioned, conventional way. When the President of the Board of Trade, Margaret Beckett, says about powerhouse::uk "British creativity is at the cutting edge. We are a world leader . . . to communications technology, our creative industries are bringing something unique to the party," you have to think she might have been talking about the way this exhibition has been presented. It almost makes one excited about what the Dome might hold.



Creativity in lifestyle looks at British designers exploring new ways of living and working through manufactured products, fashion and furniture.





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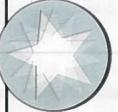


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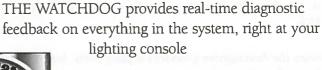


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ON THE CASE

Just about everyone in the industry uses flightcases in some form or another. Steve Moles catches up with some of the key manufacturers in the field

Like mobile phones and personal organisers, everybody uses flightcases in the entertainment world, but does anyone really care much where they came from or how they got there? A purely functional device, the case is generally a cost to be borne, not enjoyed. They are unexciting, drab, let's not beat about the bush - positively dull - but they are necessary, relatively expensive and perform a valuable function. Below is a brief examination of the industry, from the largest to some of the smallest niche market suppliers.

Before you nod off, consider this: There exists a considerable range of products between these few suppliers and they have all, in some way, invested in providing packaging suited to contents. What all are at pains to point out is that this is very much a horses for courses industry - what you want to put in it is essentially more important than what the case costs. The common argument runs along the lines of "why put a Rolls Royce body on a Fiat Uno engine", but it's actually more complex than that. For example, if you're only going to use the 'Roller' to drive bereaved families from the funeral parlour to the church, at five miles per hour, then the above bizarre combination could make sense. All the case makers spoken to talked of a lack of awareness amongst purchasers about what was suitable and why.

To open proceedings, we turn to **CP Cases**, the biggest case maker in the UK with one of the widest product ranges, and yet curiously their boxes are rarely seen in the entertainment business these days. But that wasn't always so. "CP Cases you say? Oh yes, Chris and Pete cases. Yes everybody used them," so said Pete Edmonds whilst busy production managing Barry Manilow's latest outing, recalling a name that in rock and roll circles was once as familiar as Britannia Row is today. His subsequent inquiry "Are they still going?" emphasises just how far away from their musical origins they have moved. "Not that we don't still do case for the music industry, for bands mainly, but it



Iron Maiden's lead guitarist Jannick Gers with a CP Pro Rack flightcase.

only represents perhaps 10% of our business now." So said the eponymous Peter Ross, the 'P' of the firm and its lasting director. ('C' departed longer ago than warrants recall.) CP have an interesting story: while others grew up on the oxygen of the massive expansion that took place in the concert industry throughout the eighties, CP diversified into a much broader client base. In so doing they lost their dominant position in the music sector of the flightcase market that made them, but consolidated a position in the wider field that means today they are the biggest manufacturer of their type in the UK.

In the end it's all just boxes, but there are several factors that distance CP from its competitors. Peter Ross identified the essential truth for all purchasers: "Nobody likes spending a five figure sum on a collection of technology and then having to spend another four figures on protecting it, but that's the

nature of the beast and, like anything else, choice for the customer is a balance between cost and benefits." Now, based in a part of the old Isleworth Film Studios, CP offer more choice than most.

"Technically it's about a never-ending drive to find new material," says Ross. "We still make cases to the same build technique as we did for the Moody Blues and Bee Gees back in the 70s - heavy duty touring cases. The style is fine for that kind of work. But these days we make cases for all sorts of demands - off-shore oil, the utilities, the nuclear power industry, Home Office and military, motor sport - even medical and leisure equipment."

CP have four core material types that each have very distinct applications, though in many instances they perform the same function. "The basic rock and roll flightcase is made from Finnish Birch ply. As an engineering material it's unbeatable. The fibre board exterior finish is bonded to the ply in our own 90 ton press, the surface is very hard wearing, and no matter how mistreated, the surface finish doesn't produce burrs and splinters along the edges. With high handling rate that's important. But for smaller applications - cases for the MI industry for example, where you have just one or two U of rack mount instruments - something lighter is more suitable."

CP introduced the polycarbonate case into their range in '93. They are lightweight, cheaper to produce, and sell heavily to schools, the exhibition industry, and the aforementioned music market. They do have limitations. "We don't produce a rackmount case in this material more than 15U deep anymore and it could become overloaded." Design is also limiting; what makes them cheap is uniformity of construction. Big tooling-up costs for polycarbonate are offset by high volume production, so custom tailored boxes, as is often the norm with fibre cases, is not an option.

But there are lighter materials in the bespoke



CP Cases were commissioned for the BBC's Natural World series.



Adda Super Cases' range is aimed mainly at the DJ market.

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range, namely aluminium, which anyone from the film industry has been familiar with for decades, and more recently ABS, a plastic alloy that contains an element of rubber (the B is for Butyl). The two materials, aluminium and ABS are similar in weight - some like the technical look of the aluminium better but it tends to dent, whereas ABS bounces. However, aluminium has the advantages of being completely inert and highly weatherproof, as well as more visually appealing.

To make the cases weatherproof, closed rivets are used and rubber gaskets fitted to the lid-to-box join. These are the kind of details purchasers tend to overlook. A mastic sealant can also be used to raise the weather resistance to IP6 - equivalent to a good dousing with a high pressure hose.

The most unusual material employed by CP, and from a look around their production facilities probably one of their most popular, is fabric. "Ten years ago we introduced flexible materials, camera-type bags basically. Surprisingly, we sell a lot into industrial applications, not just the broadcast business. The option of a soft bag where you don't need a big unfriendly rigid case, is very attractive for people like the small travelling conference speaker. Someone who wants to put everything in the boot of their car."

CP are also taking on EDAC, the famous Swiss manufacturers of those fully submersible aluminium cases beloved of sub-mariners. "Do you know they haven't changed the design since the end of WW2?" said Ross, neatly encapsulating all the incentive he needs to have a go. The other recent development is aluminium cases with radius edges, instead of the usual folded. Similar in appearance to the Haliburton - every American production managers 'gotta have' in the eighties - the curved edges produce a couple of real benefits besides aesthetics - the curved aluminium edge is stronger than a sharp edge folded at 90 degrees.

There are little finessing points that Ross delights in - pressing bumps and indentations into the surface of stacking aluminium cases to make them locate, rather than have to fit external devices to fulfil the same task, is just

one. When you look closely at the many different products of CP the most discernible feature is finish. It's all been developed exhaustively - catches to suit a particular purpose, even fabrics with custom printed

There's one material that CP don't use, at least not as a finished product. Straight Edge, based just outside London in Maldon, Essex, produce what they refer to as "Our bullet and bomb-proof range". Boxes built entirely from marine plywood with no additional material bonded as an exterior finish. Why not? Ian Wilson the company's MD explained. "We do supply cases that most people will be familiar with - aluminium finish, diamond pattern and the coloured Formica type surface - but we are known as a wooden box specialist. The point is you can get them repaired anywhere in the world. There are two essential roles for a flight case: one to protect the contents generally in day-to-day transit and second to guard against that fateful day when some poorly trained stage-hand accidentally rolls the box off the edge of stage or drops it from the tail of the truck. When that happens, and the contents are a heavy load, part of the energy absorption process is taken up in damage to the flight case. It's the same rationale as crumple zones at the front and rear of cars. Whether it be dimmer rack, cable trunk or grand piano, big loads when dropped will fracture any case - if they don't, it's not doing its job. With the entertainment business extending further and further into the Third World, repair facilities become a scarcer resource. And it's in just such locations where handling accidents are most likely to occur."

Straight Edge have taken the 'have carpenter, fix box' rationale to the Nth degree. Although the cases eschew the familiar aluminium edging and knuckle corners of more conventional designs, they do still require locking catches and hinge fittings. But none of these are riveted, every fitting is screwed: "You can find a zinc-plated, flange-head, posi-screw anywhere in the world," said Wilson in a possible exaggeration, but there's no doubting that you can get some kind of screw anywhere (settle down at the back there).

There are other things Straight Edge offer that make a difference, most notably adhesive research. Being a wooden box specialist has inevitably led them into speaker cabinet manufacture and as such they've entered the realms of carpet coverings. Wilson again: "We started experimenting about five years ago. It took us some time, and not a few fretful nights, working with various proprietary glues before we found a mix that's bomb proof when it comes to carpet. More recently we've been asked to provide a fairly fine vinyl laminate to cases and have come up with a glue that's amazing. EC approved, it's water based and eco friendly, but once it's dried it stays hard and you can put a fire hose on it and it won't part."

Straight Edge also include some nice little details in their cases - internally fitted catches instead of surface mounting ones, for example. A favourite for service companies is a white plastic wipe clean label for contents listing that's recessed inside the lid of all their boxes.

In the same general area as CP, Cambridge based 5 Star Cases is another company who supply cases to a diverse range of customers. "Our main business is rock and roll, about 60%, with the remainder going to military, offshore and industrial users," said director Keith Sykes. "Our customers include firms like Rolls Royce Aviation, GEC Medical and Racal. With the majority of our cases we design specifically for the customer. We only manufacture cases based on a timber sub-strata with eight different surface finishes to choose from depending on use."

5 Star are currently in the midst of a £250,000 investment programme: "We aim to be the most advanced manufacturer in the field. Upgrading our cutting and routing machines, as well as automating elements of the construction process will improve our flexibility. But automating in this has to be very precise, even a large run of cases might be only 20 or 30 boxes, so there will always be a high labour content in the process."

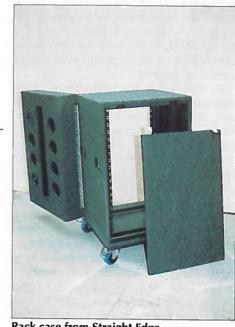
One aspect many readers may be unaware of is that they probably see loads of 5 Star products every time they visit the PLASA show. One of the company's biggest specialities, and



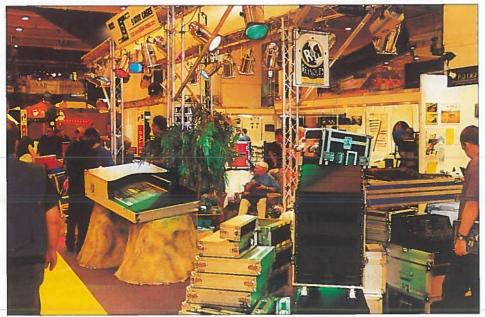
A selection of flightcases from Trifibre.



A case by Straight Edge for Vari-Lite.



Rack case from Straight Edge.



The eye-catching 5 Star Cases stand at the 1997 PLASA Light & Sound Show.

a very useful one at that, is in power distribution systems. "We make lots of case and trunk-based systems for TV and OB units, and supply a lot to the big service companies. Large Cee-Form systems, all fully protected, for example." They also have a penchant for the unusual, having produced cases for a full size model of a Bison, a scale model of the Alps, and a casing for the custom built Triple E system currently out with the Rolling Stones. It's Sykes proud boast that, "If you can draw it,"

Sykes proud boast that, "If you can draw it, we can build it" and with 16 years of successful growth behind them, and a current premises of some 22,500sq.ft, he's not joking.

A neighbour is **Adda Super Cases**, also in Cambridgeshire (Market Harborough to be precise), who are 20 years old this year and claim to be the first company to supply a professional lightweight record case. Originally developed from a cardiograph case, the product is now built in polypropylene. Adda's range is also available in aluminium-surfaced cases and comes in a selection of standard sizes aimed mainly at the DJ market.

"There is a also a large collector's market," said company boss Monica Saunders, "and the bulk of our output is for CDs and records. We enjoy a very close relationship with many of the top brand manufacturers and many newly-launched effects are shipped to us for specific cases to be designed."

It's making cases in consistent sizes that to some extent defines the niche into which Adda falls. By focusing on a specific range and offering two finishes (though it must be said a fair range of colours, Adda are able to stay competitive. The new cases are water repellent, if not submersible, and no corners are cut at the expense of quality.

"Another side to Adda is custom design and although this is generally to our own industry, we have made some very strange specials in the past," says Monica. "One was for a famous cartoon character's head - and there ahve been many obscure items for exhibition purposes."

This year Adda have started using a higher density foam for their case interiors, and indeed have also made a slight change to their brand logo. one we'll doubtless see a lot of.

"... whatever the advances in technology it's going to be a long time before we dispose of the need for a good solid box."

Trifibre Containers, a company with a 15 year history of manufacturing protective casing, mainly for exhibition applications, have taken successful steps during the past year to increase their share of the flightcase market. Operating almost exclusively in the entertainment industry, Trifibre supply specialist customised cases to a number of leading hire companies in the lighting, audio and AV fields. The company have a 17,500sq.ft manufacturing facility in Leicester and a dedicated flightcase sales office in South Wales.

The main product lines, designed using the company's in-house CAD facilities, consist of fibre and polypropylene cases, although the recently introduced Chameleon range is made from pressed aluminium. This range, with the already noted aesthetic qualities of aluminium, caters more for special presentation cases, or generally for applications where the appearance is of greater importance than the protection - which is not to say they are not strong and hard-wearing, just that strength is not the primary concern. Like I said - horses for courses. The importance of choice and diversity are shown again by the fact that Trifibre also manufacture their own increasingly popular range of soft bags.

Autopia Vanquip Flightcases, another company whose core business lies firmly within the realms of the entertainment industry, are part of the Barton Group, and consequently enjoy the advantages that come with such substantial resources and buying power. Sharing part of the Group's 25,000sq.ft manufacturing plant in Cwmbran, South Wales, the ISO 9002 accredited company design (with full in-house CAD facilities) and manufacture their cases from plywood, offering a range of

finishes including vinyl, coloured and screenprinted laminates and aluminium.

While the company's custom manufacturing capabilities allow them to cater for a wide range of applications, their emphasis remains on the twin aims of serving their established client base - which includes bands (they recently supplied all instrument and equipment flightcases to newcomers 'Electrasy'), hire and production companies from lighting, pro audio, TV and broadcast industries (they also supply direct to manufacturers) - and remaining competitive. Although always looking at new technologies and materials, Autopia have yet to find anything that serves their market as effectively for the price as their bulk-bought plywood. And it's a strategy that serves them well: sales manager Dave Osmond made the point that the majority of the company's business is repeat, and most new custom is generated by word of mouth - what clearer evidence could you need that they've got it right?

Last, but by no means least, **GDR** based in Aylesbury supply across the board, from the familiar medical, entertainment industry, TV, and mobile DJ, to the more esoteric, like wind machines for the BBC, and cases for the Band of the Royal Air Force (the instruments not the squaddies). "We design a case in partnership with the client," said GDR's Geoff Carr. We always try and push them in the right direction, things like making sure the handle positions equate to the contents' centre of vity for example." An important

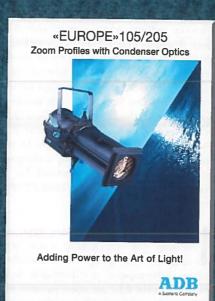
gravity for example." An important consideration, often overlooked.

GDR also offer the familiar range of case material, but they too have a material type that sets them apart. "We offer colour and choice, 40 to 50 colours, in a honeycomb pure plastic. It's 40% lighter than a wood case but just as strong." Despite which they do have an ABS laminate and Formica laminated to plywood. "The honeycomb Astroboard, as its known, is a strong as 9mm ply but not so durable, so predicted usage is important when choosing this material. For harder wear the Formica laminate is much tougher, we use a number of distinctive finishes, a lava rock look called Magma, and Everest a granite effect finish." That might sound trivial, the strength is in the material, not the fact that it looks like rock, but as Carr pointed out: "By having really distinctive finishes it makes the equipment much more identifiable and in some ways less likely to be stolen."

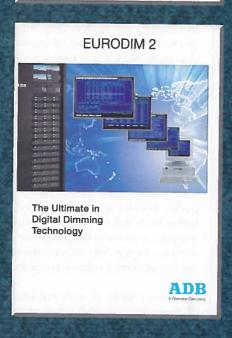
GDR also do a carpet finish surface like Straight Edge, and being a hand build specialist like most of their competitors, also have their fare share of the weird and wonderful. "Wardrobe cases for the Blobbindales being rather larger than normal is one," said Carr. "But probably the most unusual is the wind machines for the Beeb. They're actually engines for Microlite aircraft, built into a frame and boxed. Whatever your needs, chances are the flight case will outlast the contents and they'll almost certainly outlive the mobile phone in your pocket. But whatever the advances in technology it's going to be a long time before we dispose of the need for a good solid box. What was it Wilson said? "Bomb proof." We like that.

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he Chris Smith initiative to bring culture to the 'people' by taking the arts to them via performances and shows in discos has been sceptically received as naïve by critics on all sides. The general view is, of course, that the creative arts and mass-market culture make uncomfortable bedfellows.

Such opinions are presumably based on a generally laddish view of the typical disco punter, the perception of whom is that the closest he is likely to get to anything vaguely literate is that he once owned a CD by Shakespeare's Sister. It is certainly bound to be less than popular if the integration of such highbrow material into any evening's events is not thought through with some degree of sensitivity to the main motivation for people being in the venue in the first place, which is, of course, to dance their socks of.

et, there is a long tradition of mixing such cultures, from the days of the café hung with artist's pictures in exchange for food, it was such Parisian dives from which both the word and the genre developed, to the more recent phenomena of the famous New York gay discos, for which performance art and sometimes a gallery was an integral part. I distinctly remember lighting a club way back then, where the entire décor consisted of vast David Hockney paintings. Of course, they may have been copies!

As the UK's first Minister to 'come out', it may be that Smith is relying on personal experience with this concept. Of course, the entire UK dance market was considerably influenced by those seventies New York joints such as Studio 54, Le Jardin, Infinity and, later Palladium and The Tunnel. The gay market has often pioneered the most radical innovations that are eventually embraced by the mainstream clubs, and purveyors of the technology certainly owe a huge debt to the many inventive guys who set up shop in and around Manhattan in those heady days. Many of those individuals, sadly, are no longer with

However, it was largely through their creative application, first of sound, and later of

lighting, that discotheque grew out of its skin and exploded into the mega business it is today. At the same time it became absorbed into our culture, whereas previously it had been decidedly kept outside. Nevertheless, the divide still exists when it comes to sneaking anything arty under the door. After all, nobody goes to a disco intentionally to listen to opera, though I suppose Pavarotti's freak World Cup hit could be recruited to show the lie to that. Is what would be greeted with enthusiasm at, say, Heaven under the arches at Charing Cross (or might be if it were not currently undergoing a refit), indicative of what would be well received at Club Barcelona in Leeds? Probably not.

t seems to me that we are once again entering the precipitous cycle where expansion of the group-owned discotheque estate, at the expense of individuality and the entrepreneurial flair, are upon us once again. Memories are extremely short in this regard.

It is only a few short years since that particular white knuckle ride led from debt to disaster in a few swift months, with one of the players even going to jail for his sins. Yet now we once again see ads appearing along the lines of 'If you're selling we're buying' (Luminare Leisure) and 'Thinking of selling your nightclub?' (Northern Leisure) and others in a similar vein. You would hardly believe that there are already that many stray clubs around following the last pass of that particular rollercoaster!

Now, and almost inevitably, we have the spectre of the hunter becoming the hunted. Northern Leisure have themselves received a bid approach from an, as yet, unnamed suitor. Knowing my luck, the cat will be well out of the bag by the time we go to press - the financial writers are pushing hard for the name to be revealed, but informed speculation seemed to put First Leisure (another recent advertiser) or any of several breweries in the frame.

o have moved from a share price measured in the low pence just a few years ago, to a current figure, albeit hyped by the bid, in the low pounds which values the company at £350m, is bound to focus a lot of attention since it has been achieved largely through this very policy of aggressive acquisition. Doubtless, encouraged by City 'advisors', others will be sorely tempted to follow suit and will be given the wherewithal so to do. However, there's no such thing as a free lunch and payback time is always just around the corner. I watched the feeding frenzy from close quarters last time and it was not a pretty sight, with people making deals on the backs of envelopes without due care and attention.

he serious point about this is that as soon as the big boys enter the market and start buying up the smaller fish, everyone throws caution to the wind in a game of catch-up. On a rollercoaster, of course, you can never catch up and worse than that, on this mythical ride not made of the traditional steel, you can come off the tracks in the mayhem and the resultant mess hits the entire industry. It also impacts on diversity, any reduction in which is certainly not good for suppliers to the business in the UK. Let's hope people have their lap straps firmly fastened this time around.

ales from the mystic Orient, courtesy of those returning from Light & Sound in Shanghai, that counterfeit products are not limited to Cartier watches and Hermés scarves should surprise no-one. I wrote about the Martin Robocopies in this very magazine quite a while ago. The example I saw was perfect in every detail. Why anybody would bother to do this for a market which, by any measure, is minute in the grand scale of things remains a mystery. We will certainly never have the answer to this Confusion conundrum.

t is even harder to work out what can be done about it. Nothing is probably the answer - anyway not without throwing a lot of good money after bad. So, as long as the Chinese keep these imitations to their internal market I guess it could be worse. Those on the receiving end could try embarrassment as loss of face is a serious matter in China. But I wouldn't hold out much hope.

am reminded of a story told to me by Richard Pilbrow about a lecture invitation he once received from Beijing. After having completed the task for which he had been commissioned, he was told that his hosts would like to give him a thank-you present. Imagine his astonishment when they presented him with an entirely fake copy of his own industry standard tome 'Stage Lighting'! No shame whatsoever.

I wonder if they are hard at work at this very moment doing the same thing to his latest and much-applauded volume 'Stage Lighting Design'?



ALL THE WORLD . . .

In May 1996, Stage One and Hangar Services merged to form Stage One Creative Services. Steve Moles finds out why this company is more than the sum of its parts



Above, the stunning Beau Geste fantasy fortress for the Astra launch in Marrakesh and below, the indoor launch at the Congress Centre.

While things have been a bit spotty on the concert front this year, in the trade show market it's been just the opposite nowhere more so than in the realms of the extravagant car launch. This is no better exemplified than by two quite different events, one a specific model launch in Morocco, the other a major sales event in Paris. The unifying factor in these two shows is scenic - no, not the

beauty of the location, but the set builders. Quietly tucked away in a corner of Yorkshire, one company has defied the London Centre of Gravity and taken the laurels of the set building element of both these jobs.

Stage One Creative Services (SOCS) would be the first to say this is through no secret formula on their part. They are not in the business of giving the stuff away, and there's no unique product that gives them the edge: it's about service, craft and experience. There's a very obvious element to the company that gives it its strength - the tie-up of two disciplines, and therein lay SOCS's origins. Simon Whitaker founded Stage One in his garage in 1984. "We grew up on the explosion in the corporate presentation market of the eighties," said Whitaker's fellow director Simon Wood: "We did lots of conference work, and as we grew we started to do TV work as well as sets for heritage museums."

Nearby, over in a hangar on a disused WWII bomber base at Tockwith, Mark Johnson and Jim Tinsley were founding Hangar Services, a company busy carving out a similar niche, but for them focused on the more traditional theatre scenery side. "We often used Hangar Services as a sub-contractor," continued Wood, "for at least six years before we merged."



Now the coming together of theatre and corporate scenery builders might seem an unnatural alliance - apart from the mutual support element when things get really busy but both entities had something more to offer the other. "Both companies had reached the point where they needed to expand, and if we'd expanded individually we'd have had to encroach on one another's business. There was already a ridiculous amount of cross-company invoicing, so it seemed logical to join forces. But it was a long time before we said OK."

Not until the 6th May, 1996, in fact, but in the interim both companies were able to clearly identify what each had to offer the other, a valuable exercise when contemplating a long term marriage. Phil Orchard, one of Hangar Services' original team, listed their talents easily: "We had been developing our own motion control system - Q Motion - plus we had an existing modular staging system that was quick and easy to deploy; and we were able to bring a big creative input to the merger. We had a quality team of sculptors, painters and modellers."

Stage One, on the other hand, had somewhat more nebulous, though no less valuable, assets to offer. Wood again: "Probably Stage One's biggest thing was that

we had ISO 9000 in place (in fact they'd started early on with BS 5752), and that really came from the need for good organisation because of the very high turnover of our work. We also produced high quality finished work for our corporate clients, but, of course, our kit was relatively low cost because it was only up for a few days. Essentially, we differed in that HS produced theatre sets that

had to tour for long periods and were very, very durable, whilst we made things that looked great but which would only last for the few days needed." The other major difference between the two companies was the very nature of their trades: "We specialised in very high turnover - on average we put out three jobs a week," said Wood. "While we would only do three or four jobs a year, albeit massive ones," chimed Orchard.

You can see the danger and the benefit immediately. The marriage of Stage One and Hangar Services has led to a company which now boasts two locations - a 16,000sq.ft head office in Shipley where project management, drawing, carpentry and finishing are handled and a 30,000sq.ft former aircraft hanger in Wetherby where all the engineering and fabrication elements are dealt with - but which is now expected to turn out massive jobs, every week. As an example, let's consider the Moroccan project mentioned at the beginning because it neatly encapsulates all the major elements Wood and Orchard identified. To qualify the 'massive job versus high speed turnover' dilemma, this project ran simultaneously with the huge Nissan show reported in L+SI's March 98 issue. "We built the Marrakesh job for HP ICM," was



Stage One were involved in the 850th anniversary celebrations in Moscow which took place last year. The company built the Dome, Crucible and Bell elements of Mark Fisher's striking set. The dome (pictured above right) was of particular significance for Stage One; ten metres high and nine in diameter, it is the largest carved polystyrene prop the company has ever produced. The crucible and bell are seen below in construction at Stage One's premises.



Whitakers' rather formal introduction to the job, "but the client was actually General Motors for the launch of the new Astra. GM is a company we've done work for many times before and our existing relationship is strong. The show was to be in two parts: an event staged indoors at the Marrakesh Congress Centre - a venue no different to anything you might find in the UK, like the ICC for example - and a big outdoor show at the Borj Bladi, a sort of Beau Geste fantasy fortress out in the desert."

The indoor show was atypical and complex: "a real Cameron Macintosh, Starlight Express sort of show," said Whitaker. "A one hour presentation, the overall set and stage was designed by Mike Desmond and featured a fabulous light show by Durham Marenghi, a stage set consisting of giant replicas of special features of the new car, and revolves, man lifts, moving trucks and a spectacular reveal for the finale. In all, 17 axes of automated control."

The show was well focused, performed as it was by professional actors. There were no offerings from company executives so none of that slightly amateurish element that can be so distracting. The whole purpose of the event was to powerfully convey, and imprint on the minds of the assembled sales teams, the important new features of the car.

It's worth mentioning that the kind of things conveyed were seemingly small details - improvements to the glove-box, and the rear axle-suspension assembly. These might appear quite dull, or just plain trivial, but when you're trying to differentiate your vehicle from 20 rival models - models that to the casual eye look pretty much identical - then these things are important. After all, every lighting and PA warehouse is filled with speakers and Par lamps, it's what makes you different that's important. Now to hold someone's attention when talking of rear suspensions is some feat, but having seen the presentation on video I can

vouch for its eloquence, and it's here that the artistic skills of HS come into play. With all the details portrayed, all were presented larger than life, indeed the opening presentation takes us down to the molecular level of the paint through video and computer generated graphics (though, in truth, this was the one part that was a little patronising and didn't really work). For the suspension assembly one part was a 3D rendering on the set, a seeming abstract because it was incomplete. It was then enhanced by overlaid projection that completed the full assembly. So well integrated was the scenic artwork with the projected image that it was difficult to spot the join, as they say. The trompe l'oeil was so complete as to be mesmerising and is a tribute to Mr Orchard's craft.

The moving trucks Stage One provided were, in fact, mobile lecterns used by the actors, portraying a mildly robotic demeanour, to shift emphasis from one part of stage to another. Run on Q-Motion control, the actors were able to shift the lecterns about the stage with on-board control, rather like Daleks. But when the big reveal came, or the truck needed to shift slightly to avoid collision with a giant low flying glove-box, then off-stage control could take precedence and override what the actors were doing. In essence, the indoor show drew heavily on the strengths of HS.

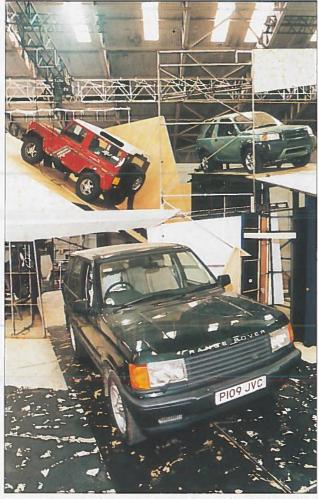
At Borj Bladi the presentation was very different. Following the indoor show, the dealers were given two days in which to thrash about the desert in the new cars before returning to what they thought would be more of a farewell party than a further presentation. The fantasy fort at Borj Bladi is, in fact, a replica, but this being Morocco, and things being what they are, it was still built in the traditional way using stone, cement and manpower. To give you some idea of why, you only have to hear Orchard's comments on what happened when Stage One turned up with their set: "When the locals started to unload the stacks of four-b'-twos off the truck you could tell they'd never seen so much wood before. They handled it like gold." And indeed, the local entrepreneur who developed the site (it is ultimately a 'tourist' experience) has already expressed interest in purchasing the set to augment his existing structures.

From the outside, what Stage One have built looks just like an extension to the fort. A separate building, it stretches over 45 metres with 12.5 metre high towers and a four metre high runway running its full length. However, it is not a typical scaff frame structure with flats attached by cable ties and whatever else. It's an integral building. Stage One have invested in developing their modular staging, which comes in basic 4x4 and 8x4 decks, to integrate with a rosette-node, modular scaffold system. Exterior scenic cladding also fits directly onto the nodes, which is important, as we shall see. Thus the fort was structurally strong enough to permit the new Astra to be driven through and on it, plus a troop of Bedouin warriors on Arab Stallions to gallop along the battlements. Coupled with a major fireworks display by Millennium Fireworks and much other razzmatazz, this was just what the assembled dealers were expecting. However, for the grand finale the massive five metres tall fortress

doors swing open to reveal a vehicle the assembled crowd had not seen before. The reveal of the new Zafira in such spectacular fashion is only possible because of the staging system. The fortress doors - each weighing 300kgs - and their substantial hinge mechanisms, fit directly to the rosettes. The inherent strength of the whole structure allows for the full width and height of the aperture thus revealed to be unencumbered with cross braces, ledgers or anything else, thus permitting the emergence of the vehicle within. OK, so it's not jawdropping, we've all seen Harrison Ford do it in Indiana Jones, but in these circumstances it's bloody clever, and for a lot less budget than Spielberg had.

"It's been a really good job for us," said Orchard. "The carpenters and metal workers have really enjoyed - it's not often they get the chance to really show their stuff." Or spend time in the desert while the rest of us are freezing our nuts off back home? But in fairness they didn't dilly dally. "The steel work took two days to put up, another four to clad, paint and finish. We surprised even ourselves."

This was something special for Stage One, as Wood said: "It's a lucky designer who gets his original concept built. There's so much chop and change, especially in the budget, that inevitably ideas get diluted." But this was more focused. "They weren't just throwing money at it. They were trying a lot harder to capture people's imagination. Some 16,500 people will have seen this by the time it ends. That's a fair



Stage One created an Experience Theatre for the launch of Land Rover's Freelander. The project included a six car reveal and AV presentation.

return on the investment." And if you thought all these big prestigious jobs have allowed Stage One to forget about those little, fast turnaround jobs, think again. Not only did they get Morocco and Nissan out over the New Year period, by the end of May Stage One will have provided sets for over 90 different events. Not bad for 38 employees.

Astra launch photos: John Parker

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SHOWSTOPPERS

Tony Gottelier and Ruth Rossington file their reports from SIB in Italy and PLASA Shanghai in China



L+SI associate editor Tony Gottelier with club designer Beppe Riboli.

Ever since Coemar unveiled the 'Robot' at an earlier SIB - the revelation that launched a thousand waggly mirrors and thus a lighting revolution, literally, by bringing moving lights to the masses - we have been de-camping to Rimini each year in the unlikely expectation that there is something weird in the local spa water which is likely to generate the primordial soup from which giant leaps of technology are thought to emerge. (No insinuation intended regarding the brew on offer at the Rose & Crown). Well, it never happened again, and almost certainly never will. Now, under pressure from exhibitors - though strangely, it seems not from visitors, and with barely a whimper, SIB has become a two-yearly event.

The push from exhibitors to cut back probably had less to do with the costs of the event and more to do with the huge pressure the Italian lighting manufacturers felt under to produce something radically new for their home crowd each year. This must have been a major drain on resources, with each trying to out-do the other in the techno-ego department, which only served to further whet the appetites of the fashion hungry. A vicious circle indeed. Since there is something peculiarly Italian in both the cause and effect of this need to, how shall we put it, well show off seems appropriate. So, if you remove the arena you solve the problem at a stroke.

Well though these are not changes of titanic proportions (SIB hasn't sunk without a trace, it has simply slipped its moorings), I doubt that it will ever be the same again, nor that it will have the same international significance in the future. Indeed, there appears to be a parallel sea-change occurring in the Italian discotheque genre (see No Comment, April L+SI) which will itself impact on this situation.



Coemar's Bruno Dedoro (left) with Chris Rolph and Ian Brown of Coe-tech and Sean Doyle of First Leisure (right).



Anna Rita Rossi and Franco Bertini of Studio Due with the new CityColor.

All of these factors may have played a part in making this year's SIB noticeably pianissimo compared with previous years that we can remember (though the organisers claim a staggering 39,888 attendance). As if everybody, exhibitors and visitors alike, felt a sense of coitus interruptus, as if restraint was incumbent on all participants in the performance.

However, there were significant things going on under the surface, especially in what the sponsors of LDI refer to as the 'vapourware' department (this is the limbo to which products are consigned when they are development items which may never see the light of lamp). Some of these have the potential, yet to be fulfilled, to make as significant a contribution in the future as the ill-fated Robot made back in the mists and myths of the not-so-distant past.

At PLASA there were two experimental video-based scanners on show, one from the Italian Lampo, the other from Henderson Stage Lighting which is the Pixelscan being sold by Lamba. Neither drew much attention at the time. Now, however, they have been joined by Innovation from FAL. All three use a TFT/LCD video engine and move the image with the before mentioned waggly mirror. All are using a 1200W light source and managing not to fry the LCD panels, but for how long in the field is anybody's guess. The delivered brightness is, frankly and unsurprisingly, disappointing. The fact that two of these companies are offering the system without the mirror indicates that they all have a way to go to overcome the various problems with image orientation. But there are great things around the corner, especially when the serious players take it up, as they surely will. The days of infinitely programmable gobos cannot be far away.

Another attempt, by a different route, was



Adrian Greenwood of Electrosonic with the company's new videowall system.



Norah Phillips of PLASA with Guiseppe Caruso from the British Consulate General (left) and Anthony Lunch of the DTI.

presented by Taiwanese newcomer ATS. Their idea was to combine a laser scanner with projector optics and a VIP 270W lamp. This lamp is a new one on us, but they claim 16,000 lumens, 5,600°K and 1,000 hours for it. The result on the screen was somewhat shaky, as with many low-cost laser scanners, but the idea has merit and if they overcome those teething problems, the JumboRay could turn out to be a useful device.

None of this future promise could distract from the here and now and the 'best of show' had to be Studio Due's CityColor. In a format more readily recognisable as an exterior architectural fitting than others of the type, CityColor is a high powered adjustable floodlight with built-in colour mixing. The colour system, based on the CMY principle, uses two pieces of each colour in a 'shutter' or 'metro door' format and slides them in and out under DMX control. There is a choice of lamp, HMD 1800 which has a colour temperature of 5,600°K, or a 2kW halogen. The unit is weatherproof, though possibly some additional anti-vandal armour would be desirable. This product was snatched up by Lumenation, the architectural lighting arm of Ian Brown's Coetech, for distribution in the UK.

We were also very taken by **TEAtrart**'s clever folding, modular stage and riser system with concertina support system which is so portable it defies its weight capability of one tonne per square metre.

So on to the alphabeticals. Abstract launched three new products. The VR8 is a stunning-looking scanner (surely this is the way all scanners will look) which has made its official production debut in Italy and features 12 colours, 12 gobos and a powerful MDSD250 lamp. Also launched at Rimini was



FAL's Paul Dodd with the company's new Modulo centrepiece.



Matthew Cano, Tyrone LeMercier and Andrew Eastwood of Ryger.

the Duo Colour, a compact twin-head colour changer available in both 'touring' and 'club' versions and finally, the dimunitive Gladiator Revolution. AC Lighting launched the Jands Echelon, a new 1000-channel controller which features the Wholehog II operating system and is intended to address the programming time associated with intelligent lighting fixtures.

Clay Paky, in tandem with Pulsar, took their first opportunity to show their new range of six moving head projectors really moving and doing their stuff, since their first introduction as prototypes at LDI. In fact, in their demo, each unit became its own spokesperson, introducing itself to the audience. There is a range of four washlights, called Stage Color, from HMI 1200 down to HTI or HMD 300, and there is a 1000W halogen version of this unit. All have lots of bells and whistles, but perhaps the most interesting is the addition in some models of an amber disc which enables smooth, linear adjustment of the colour temperature between 6,000° and 3,200° and a selection of three frost filters, one with a diffusion angle of 50°, in addition to the CMY colour mix. The two moving profiles on offer are Stage Zoom 1200 and Stage Light 300. Stage Zoom and Stage Color 1200 are two blood relatives from the same lineage, in that they both have an identical light engine and the front optical section is fully interchangeable, which should appeal to rental companies.

Coemar were on the starting grid with their carbon-fibre bodied CF 1200, also prototyped at LDI, and displaying superior power-to-weight ratio as the result also of its lightweight flicker-free electronic ballast and ignitor. A 1200W MSR SA (short arc) lamp in a 'cold' glass reflector delivers the high octane output for this driven head weighing only 23kg and which claims a top speed of 180° in one second. This unit is a fresnel so that it can



Lon Yin (left) and Davis Yang of ATS with their new JumboRay.

double as both a spot and a washlight offering built-in angle selection from 5 to 15° in spot mode, and from 8 to 40° in wide angle, using the remote zoom to smooth the cornering. As usual with Coemar's products, every facility known to man is packed in under the bonnet. Check it out.

At the same time, they also introduced the new 4kW version of their NAT TM orbital head projector, which was featured earlier in the year at the opening ceremonies for the Stade de France where 16 of the breed were doing a creditable emulation of choreographed moving searchlights. Meanwhile, under Coemar's budget Tas label, which often produces country cousin versions of the parent's latest high tech developments, we were introduced to Kp12 and Cf6. The first is the ali-bodied moving head focusing spot while Cf6 is the colour mixing fresnel/washlight.

Electrosonic's AV division have a series of new innovations up their sleeves this year, but we are under the rules of the confessional and unable to reveal all until after the world launch in the summer. However, despite the embargo, we can reveal that they will introduce a system of videowall processing which can manage any source, from video to workstation resolution (SVGA at first), in real time. Multiple sources can be displayed simultaneously with options to resize, vector and overlay different standards at ease and outputs from 15kHz, 31kHz and 800 x 600 can be selected. Control is via a new version of Electrosonic's C-Through software. The Dartford-based company, for whom 'imagineering' would have been the perfect description if Disney hadn't pre-empted them, will also launch a videowall cube for the rental market using a Texas Instruments' DLP projection engine. An early version was on show at SIB.

Eurotech are a French company with some



Rocchi Diego of TEAtrart with their new modular stage and riser system.

quirky devices, the most interesting of which was their 3kW linear strobe with a built-in three-colour scroller, all controlled via DMX.

This year there is evidence that some manufacturers are bored with conventional waggly mirrors and are playing with other ways of deflecting the beam. FAL, who always have a rash of new products at this time of year, unveiled Modulo, a single spinning mirror mounted on a turntable directly above the focusing lens of an MSD 250 projector to give their version of a dynamic, global effect. The idea being that several can be configured together to form a centrepiece. They also proposed a small moving head based on the MSD 250 and called Three-Sixty. Promo 3 is a commercial projector capable of holding five transparencies, or five gobos, with image rotation and indexing. Several other FAL projectors now have attractive diecast and extruded aluminium bodies and Paul Dodd, FAL's in-house lighting designer, has developed a new Lightmaster controller which addresses what he feels are the inadequacies of the brand leader in this sector.

Griven is also experimenting with alternatives to the waggly mirror. They displayed their usual range of showy pieces including two new effects using a double mirror scanning system to give full 360° rotation of the beam, called Compass. The advantage of this technique is that very high rotational speeds can be achieved. Various effects are packed into the two models that come with either HMI 575, MSD 250 or HMI 1200 lamps, the latter including remote focus and prism rotation.

Though the timing may have been a little unfortunate, given that this is the last Rimini before the show takes a sabbatical, it was an Italian first for **Hardware for Xenon**, who brought with them their new 7000W Optimal







Above left, Julio Savoldi of Sagitter with the Infinity Live (Sagitter's light show was run through a ShowCAD system); the ever impressive Clay Paky/Pulsar presentation (centre) and Abstract's sassy looking VR8 (right).

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Yves and Jacqueline Ruellan of Hardware for Xenon with their new 7000W projector.

Light System projector. It looks good on paper, but is even better in the flesh and if you're looking to cast bright large-scale images around, then make sure you check this out. This is the first in what the company expect to be a new series of projectors and the key here is control - in this instance, the Universal Digital Controller (UDC) which can handle up to 10 DC motors and which controls all the motorised elements of the projector, in other words all its special effects. Because it has a computer built-in, it can be programmed with its own special effects cues or receive data from a remote source, so that effectively there's no limit to the number of special effects and the number of projectors it can control - it could even, theoretically, control scenery, curtains and stage machinery.

Bob Schacherl of **High End Systems** was celebrating a new financial partnership for the corporation and the first deliveries of Technobeam introduced at PLASA last year.

Laser Magic, who are making waves in the cruise market these days, have formed a marketing consortium with a Belgian company to sell their wares and their LM Production facilities in Europe. They exhibited at SIB under this banner and the same grouping was also promoting the Canadian MDG haze generators.

There was a certain whiff about the Lighting Technology stand, where their new Par 64 Parfume was to be found. This is now a fourhead system for touring with remote tank unit and should, when added to their Aroma 280 and 400 units and a new Hazer, place them at the head of the smell queue. However, the big news is their liaison with two very well known companies in the industry. In partnership with MAD Lighting, they are setting up a new joint company to act as a distributor for the range of QScan retail products that David Summerland and the team at MAD have been working on over the last six months. Lighting Tech have also entered into a trading partnership with John Lethbridge's Cerebrum Lighting (which we'll expand on in the next issue).

Martin Professional were showing the new MAC 250, which uses an MSD 250 lamp in a compact version of the 500 and 600 models. Also from Martin, the Roboscan 918 - the King of the castle in the Roboscan range of effects scanners, which can run via DMX512 or Martin's own RS-485 protocol and offers 67 colour combinations - and ProScenium, a PC-based DMX design package for lighting programmers and designers, aimed at a broad range of show and display applications. JEM, meanwhile, introduced a new mid-sized portable smoke machine, the ZR12 AL, which has enhanced output and '8 x Mode' auto timer functions.



David Summerland (left) and Scott Callis (right) of MAD Lighting with Paul de Ville of Lighting Technology.

PCM/Pfaff have taken a long hard look at their motor controllers and have essentially repackaged the units - the end result being a real step down in price which is clearly good news for the punters. The Prostar has also finally been launched (this was first shown at PLASA some two years ago in prototype form) but has now been modified to a single phase unit and PCM have just put 80 into stock.

Ryger's Tinyscan, first launched at PLASA 97, has been undergoing further development since last September and was attracting the interest of mobile DJs who are smitten by the package deal being offered by the company whereby they can walk off with four scanners, lamps, DMX leads and a pocket DMX controller pitched at a not unattractive price so good in fact, that the company have shifted 400 packages since PLASA.

SGM's ColourDynamic projector, which we first saw at LDI last year, was on show. It uses a rotating fibre optic bundle, slightly out of focus, with a slowly turning random colour wheel at the other end - like a subtle version of fractals, or a crystalline structure with a coloured liquid overlay. Good fun.

The ColorDynamic would go well in Sèleco's 'blue room', not to be confused with chromakey, but instead a proposal for what is known in the UK as a chill-out room. Apparently, all clubs in Italy are to be obliged to have at least one room where punters can escape into peace and quiet to cool down. Sèleco see this as a big opportunity for the sales of their video projectors, and in particular their new generation products which use the TI DLP projection engine which delivers phenomenally good images both in terms of colour rendition and resolution.

Space Cannon made a big impression with a huge display of their latest searchlights, both driven yokes with DMX control, and others which have the Ireos colour changing system which is a clever adaptation of old technology. Remember those children's torches with built-in colour changer which were a series of concentric coloured tubes surrounding the lamp? Well, that's exactly what Space Cannon have done with three CMY dichroic coated quartz tubes linked to a discrete drive system, this system delivers six colours in the beam and the dowser is achieved in exactly the same way using a ceramic outer tube.

The CO2 Jet from **The Effects Co** first seen at PLASA is now well into its stride, having been used in anger on both the Boyzone tour and the Toyota car launch this year. The technical aspects of this have already been covered, but one innovation not touched on previously is the sensor mechanism which uses an infra-red detector to automatically regulate the amount of CO2 content in the air. The above is just a



The Martin Professional enclave where the full range of moving fixtures was on show.

taster of what was on the show floor at Rimini and as space is tight we've highlighted some of the more interesting new developments. We will however, feed further product news from Rimini into the next issue of L+SI.

It's doubtful whether SIB will ever be quite the same again. But at least it gives us two years for the Italians to recover from the shock when England lifts the World Cup. Maybe they will have forgiven us by then!

Within a few short weeks, the band of travellers had upped sticks and a much smaller camp had planted itself in the business district of Shanghai for PLASA Presents Light & Sound Shanghai - the first ever PLASA-organised event in the Far East. Despite the rapid westernisation of China, this was always going to be a risky venture, largely because the Chinese market is something of an unknown quantity, so all credit to PLASA for not only securing the Sector Challenge funding to promote the event, but having the bottle to see it through. In the event, the pre-match nerves were unnecessary and although there were teething problems which will surely be ironed out for next year, it was universally declared a success.

If you've not been to Shanghai then nothing can prepare you for the reality: the city itself has a skyline that would put Dallas to shame and before too long will probably boast the most populated air space on the planet as the high rise hotels and offices creep ever nearer the sun - you only have to scan the skyline for cranes and bamboo (yes, really) scaffolding to get an impression of what Shanghai 2000 might look like. Of course, all this is somewhat superficial: scratch the surface of the city and there are still real social and political problems layered beneath, but at least it demonstrates a willingness on the part of the Chinese authorities to develop the infrastructure of Shanghai. It also bodes well for the entertainment technology industry for heavy investment is taking place in major showpiece projects - witness the new Shanghai Opera House, claiming its place in downtown Shanghai and gearing up for its official opening in late summer, the impressive new sports stadia complex and the Oriental Television Centre - all of which we'll pick up on in future issues of L+SI and S+CSI.

On the show floor itself, the skyline was a little different and looked for all the world like 'Son of PLASA'. For many of the major Western movers and shakers, the show presented the perfect platform from which to test the waters and the majority were generally very positive about the number and quality of visitors, though realistic enough to recognise that they will not be able to gauge fully the success of the venture for some time to come.

Unusual Rigging, who are doing rather well over here, are certain to be doing rather well over there before too long and if their current portfolio of West End projects is anything to go by (Doctor Doolittle, Whistle Down the Wind, Saturday Night Fever et al), it can't be too long before their rigging expertise is being applied across the Chinese mainland. To aid them in clarifying their services, the company has been involved in a little housekeeping of late and has lifted the stage engineering elements from the rigging division and set up a new company, Unusual Engineering. Sharing the stand with Unusual were Total Fabrication (one wonders what Chinese translation makes of the European style of self-mockery when it comes to naming a company) who have recently taken on additional space adjacent to their UK HQ which will primarily host their forthcoming training courses on rigging practices.

Osram had fielded a lot of interest from TV studios and were also noting a great deal of OEM interest, whilst the trussing on the stand of Penn Fabrication had drawn its own crowd and if the company are successful in their bid to find a distibutor in the area then Colin Freeman will no doubt feel that it was all worth it. Another company on the hunt for a distributor is James Thomas Engineering, who are keen to promote their latest development a new fold-flat truss system compatible with 52cm Supertruss which packs down to less than 100mm wide and offers approaching 75% of the strength of regular truss.

For ADB, Shanghai was a chance to build on an already well established presence in the market - actively sought and fought for by their distributors in the region Ace - and readers of L+SI will get a chance to learn more about the company's critical involvement in Shanghai's Opera House when we run a major feature on this in the September issue.

Special effects laser company **Oracle** are a company on the move if their recent involvement in Suntec City - the largest shopping/conference centre in Singapore - is anything to go by. Oracle not only designed the control and entertainment system for the complex, but also installed their own 360° water screen. This Australian company has now established an office in Singapore.

LCI Ltd already handle a lot of work in the region, mainly in theme park and leisure complexes, and are just about to install an ampitheatre water screen show in Qing Dao. However, what got the old journalistic nose for a story itching is a project they are undertaking at the Lisbon Expo where they will be projecting images onto a balloon for which they've developed an infra-red tracking system (more on this in a future issue).



Sammy De Havilland of Deco (centre) with interpreter Gary Pan and Chen Tiangang.





Above left, the show's opening ceremony was attended by a host of local and international dignitaries. Right, PLASA's Anna Pillow on the PLASA stand with British Consul-General Warren Townend and show organiser James Brooks-Ward of P&O Events.

Tomcat have recently opened a new UK office (more on that next month) but what will matter more to the Chinese market is the new line of truss the company have introduced, as yet unnamed, which uses an inline connection for the all-female truss effectively allowing rental houses to deal with just one type of connector.

Theatre Projects Consultants seem to have a hand in just about every prestigious international theatre project of any standing so it was no surprise to find David Staples in China discussing their role in several forthcoming new buildings, notably the Esplanade Arts Centre in Singapore which opens in the year 2000 and which we will carry more details on next month.

For a large number of the companies exhibiting - AC Lighting, Avolites, Ceep, Celco, Clay Paky, Columbus McKinnon, EMO, Gerriets, Jem, Laserland, Lee Filters, Lightstorm (with Anytronics' new Lightwire 'illuminated string') LMP, OpTex, Pani, Pulsar - who have very high profile and well established brands in the West, it was of course natural that they should want to be in on what is, after all, the fastest growing economy in the world. For those UK companies who attended there was the added bonus that the show had been successful in its bid for substantial funding from the DTI through the government's new sector challenge scheme.

Much of the new audio technology that was present has already been covered in our report on Frankfurt last month, but it was good to see key players like Martin Audio (with the C516 and C115 install speakers), Celestion (whose new range of speakers is coming on line gradually), BSS Audio, Fane (with their Colossus range), Adam Hall and Audio Design Services (showing their range of public address amps and speakers) flying the flag. Like many of its audio peers, Matrix, a relative newcomer in

audio terms (having been established just three years ago) went to China in the hope of appointing a distributor for the region and had already picked up a number of interesting OEM enquiries. With the Chinese appetite for bars/clubs and themed restaurants on the increase, Matrix should see their new M Series and UK Power Series amplifiers heading towards small club/café bar installations in large quantity.

By the time I caught up with Sammy de Havilland of Deco Leisure and Dare Professional Audio, he had not only picked up a new distributor, but had also signed a major order, and there was more positive news from Tannoy. Having had, for a long time, a healthy share of the monitor market, last year they took a fresh look at their PA line and concentrated their efforts on new product development - it paid off for they witnessed a remarkable period of growth (the market in the UK alone saw a 54% increase) and surely their decision to return, in part, to their roots will also find favour in the Asian markets as they expand back into public address systems.

The Chinese exhibitors fell into two clear camps: the large majority were distributors for recognised US, European and Australian product lines, but there were several who were manufacturers in their own right. And before outlining what a few do - an apology. An L+SI journo's grasp of Chinese is about as good as his/her Riverdance technique so it was a tad difficult, to say the least, to get to the finer nuances of product development. Macostar manufacture a whole range of products consoles, dimmers and scrollers - and undertake a lot of project work in the region. He Dong Electronic Co, as well as being a distributor for several UK and European manufacturers, is a manufacturer in its own right of stage lighting control systems and its M64 controller and HDI lighting desks are



LCI's Brett Salmon and Roland Connor flank Ma Zhiliang of SMI and Sharon Zhang.



Lee Rickard and Barry Parker of OpTex show their Omni ballast to Dennis Chan Yue Kenng.

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The combined team from Unusual Rigging and Total Fabrication.

sufficiently well designed for it to be one of the few Chinese manufacturers to have ISO9001 accreditation. Many of the companies have links with the government and the Zheijang Stage Design Institute is attached to the Cultural Department of China for which it undertakes R&D in stage lighting and control systems. There were lots of specialist film and television manufacturers, notably Beijing Xingguang Film & TV Equipment Group (probably the largest lighting manufacturer in China), China Baoding Movie & Television Equipment and Ningbo Dafeng Film & TV.

Unfortunately, and not entirely unexpected, there were a small number of Chinese stands on which some manufacturers had found products not dissimilar to their own marketed under names that were so close to the original as to beggar belief. Imitation may be the sincerest form of flattery, but it's cold comfort to those who can only stand and watch whilst the issues of cloning, patents and intellectual rights whirl in the ether and offer little protection to manufacturers and designers who cannot even compete on an even playing field, potholed yet further by the low cost of manufacturing in the Far East and the strength of the pound. There may be some consolation in the knowledge that the Chinese do hold in high regard Western expertise and technology



Mike Fisher (left) and Rod Bartholomeusz (second right) of Lightstorm with distributor Kenny Lo of Prosperity and Jon Petts of Jem.



May Yam of Avolites is besieged by visitors who want to know more about their desks.

and in many cases are willing to pay extra for it. Certainly, at the moment, quality is an issue, but the fact that these companies are manufacturing at all demonstrates that there is a market demand in China and you can either take this as a positive or a negative. Companies should think twice, however, before being put off by all of these issues - they are best dealt with head on.

China is a huge potential market: Shanghai is the leading trading centre for China and has a population of 16 million in the city alone and 250 million in the hinterland - equal to that of Europe. With 1,438 nightclubs, 88 theatres, 1,267 hotels, 5,148 large restaurants, 77 conference venues and 89 professional film production studios, the former Paris of the East is China's largest economic metropolis, and few companies are going to win contracts from the other side of the world. And let's not forget that pretty soon Chinese manufacturers are going to be producing very high quality products (many already are) en masse and the country will almost certainly see explosive growth in design, manufacturing and service companies and they will set their horizons further than the Pacific

Forget the slow boat to China - if you don't want to be left behind in the rush, book early for PLASA Shanghai next year.



Derek West and Richard Gainsborough of Tannoy with Winson S K Wong of Dah Chong Hong.

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Automata in the Stalls . . . Ian Herbert

ext month the Czech Josef Svoboda, the greatest name in post-War theatre design, not to mention the inventor of the light curtain, will be in London to address a conference on the relationship between British and European design. The 'European' school of British set design has had big successes over the last decade and the relationship seems pretty obvious to me, but do you think there's also a European style of lighting design? Is it Jean Kalman's big floods, or Wolfgang Gobbel's autumnal washes?

y official keeper-awake would say its main characteristic is the absence of light - the recent visits of the Comedie-Francaise and Stanislas Nordey's company took us much further into the twilight zone (and me more quickly to the snoozezone) than would a parallel English production. When Simon Corder tried to do this for the RSC's Les Enfants du Paradis last year he was howled to scorn by critics complaining that they couldn't see the effects he was creating in what would, in real life, have been a very dimly lit theatre indeed, since it had no electricity. Curiously, when he did exactly the same thing last month for The London Cuckolds at the National, using the greatest discretion to light Bill Dudley's restoration theatre set, he won praise from those who noticed at all.

f I were looking to define a European style, it would have to relate to the fact that in France, at least, many directors have a hand in their own design. Georges Lavaudant at the Odeon does his own lighting, Stephane Braunschweig does his own sets and Terry Hands, our most French-influenced director, will always plot his own shows. Some LDs will probably complain about being done out of work by these intellectuals with clipboards, but you could argue that it's raising the status of lighting design and raising the general awareness that lighting is important. The classic case of a director doubling as lighting designer is the American Robert Wilson, who can be considered an adoptive European since he does so much of his best work there. Besides, they don't like him in the States: his Lohengrin this year at the New York Met had the fox-fur



Bertolt Brecht's Der Ozeanflug.

brigade rattling their pearls at him in derision. I've just come back from the Premio Europa weekend in Taormina, Sicily (a tough job, but somebody had to do it) where the latest work by Wilson, who won the prize last year, was on view: a three-parter devised for the Berliner Ensemble to celebrate Bertolt Brecht's 100th birthday. (No, he's not still alive, but his theatre, the Ensemble, is - do keep up).

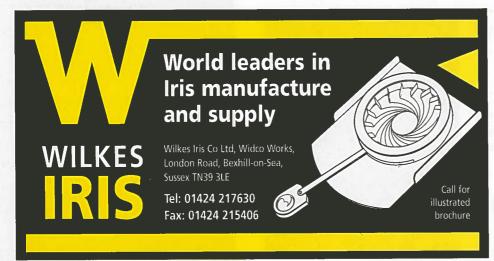
er Ozeanflug (Ocean Flight) was a radio play written by BB in 1928, about Lindbergh's solo crossing of the Atlantic. Wilson has put it on stage with two other very text-based pieces: Landscape with Argonauts from his long-time collaborator Heiner Muller and Notes from the Underground by Dostoevski. If this sounds like a heavy evening, don't despair: there is a playfulness about much of Wilson's approach to even the densest work, and very often he seems to be saying, 'It's OK, don't worry about understanding this, just enjoy it.' The hallmark of a Wilson show is its visual and sonic clarity, the elegance of movement and (above all to me) its meticulous use of light. These three playlets used the full battery of kit - to achieve a whole series of very special effects. The lighting credit here goes to Heinrich Brunke, the Berliner's resident LD, but the hand of Wilson is evident in the lightinduced moments the show achieves.

he Brecht and the Dostoevski were deliberately monochrome, with most of the costumes black and white, while the centrepiece, the only one to make much use of

scenery, strayed into some subdued blues and greens with a couple of red wedges and a splendidly incongruous zebra-skin sofa. The lighting palette was similarly restrained, mostly white relieved by steels and deeper blues. Wilson is not afraid to use fluorescents to beef up a cyc, and at one point, for no obvious reason, he lit up the area beneath that sofa with a quick burst of fluorescent tube.

hat Wilson has done with these wordy texts is literally to illuminate them, in the way that a medieval monk might fiddle in the margins of a manuscript, to the extent that the pictures come to mean more than the text. Wilson's illumination is the lighting designer's art. Characters move like purposeful automata across the stage, into side-spots, in and out of top-spots, dropping into poses plastiques in snap-cue flashes of brightness. A face alone is lit, or a hand. Bodies seem to disappear as they go out of the carefully positioned top and side beams. A parade of goose-stepping office workers emerge, incongruously, from a cloth column apparently standing free in the centre of the stage. From time to time, characters appear in the balcony boxes to add commentary to the action, their faces alone lit by spots across the auditorium. Whatever it means, it's a stunning set of images and a show worth catching if it comes to a festival near you. I fear this is unlikely unless you know some very rich festivals, since for just two performances in Taormina the Berliners had the luxury of a seven-day get-in. Not surprising in view of the show's complexity, although the local technical director remarked scathingly that if they'd read the stage plan properly in the first place they might have had an easier ride.

erhaps it's just coincidence, but two shows I saw in London last week had echoes of the Wilson precision lighting about them. Hugh Vanstone's plot in the Barbican Pit for Mark Thompson's very European set (plexiglass floor over a stretch of real railtrack, sleepers on gravel beneath; stylised carriage backdrop) was just right for Yasmina Reza's very elegant two-handed trainride, The Unexpected Man. Snap-flash cue changes, light corridors, overhead spots and poses held in them to indicate scene breaks - it all had a distinctly Wilsonic flavour, though the credit goes undoubtedly to Mr Vanstone. Sadly, some similar tricks from Howard Harrison in Joe Penhall's The Bullet at the Donmar characters frozen in single beams as a scene comes to a rather inconclusive end - didn't work nearly so well. But then, nor did the play, and I'd point the finger more at Dominic Cooke's clumping direction and Christopher Oram's huge and ugly Donmar set - a kind of MFI Valhalla with lots of wooden mega-kitchen units and a giant back-wall staircase (cue for clever-clever spots across and through its open treads) than at poor Mr Harrison. Where the Vanstone plot illuminated, the Harrison one merely punctuated.



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SOUND FOR NEVERLAND

The National's recent production of Peter Pan brought its own challenges to sound designer Scott Myers. Lee Baldock went to the Olivier Theatre to meet him . . .

The National Theatre's Peter Pan, reworked by director John Caird and Trevor Nunn, is a first rate production with excellent credentials: set design by John Napier, lighting design by David Hersey, sound design by the National's Scott Myers, and starring Jenny Agutter and Sir Ian McKellen. As the production disappears for a spell in storage, ready to return later in the year, Scott Myers and his team will be getting ready to grapple with the next project at the Olivier. The challenges involved with the National's repertory system are greater, Myers believes, than anything else he has dealt with in his long experience - and he obviously thrives

Myers explains: "Because we run a repertory system we can't specify equipment for each production, which makes the design process more difficult. When I design a show for the West End or New York I can specify exactly what equipment I want to use on that production. Here, I don't have that luxury - I have to make it fit."

Which isn't to say that the National is hard done by: how many theatres would love to have a Meyer sound system, Yamaha's latest digital mixers and a dozen channels of Sennheiser radio mics? It's just that the demands of the repertory system require the Olivier has a fixed sound system and the skill of the designers and operators lies in working around the consequent limitations that that imposes and adapting to each new production.

"We have Meyer MSL2s on each side with another two in a centre cluster position, a cluster of Tannoy CP12s which we use as a vocal cluster while the MSLs are for playback and effects," explained Myers. "There are two Electro-Voice Deltamax speakers in a fixed position upstage, which may or may not fit with a given production - but I can't move them because we don't have the time or the staff to rig and de-rig. There are also two EV S200s upstage on the pillars which are permanently rigged, so I'm stuck with that."

A perfect example of Myers' skill in working within these design limitations is the case of Tinkerbell in Peter Pan. For this he was required to create the illusion of the voice of Tinkerbell moving around the stage with

the projected image (provided by a very effective Clay Paky Superscan with rotating gobo and prism effect).

Myers takes up the story: "I broke that down into scenes and thought about where she could move in, say, the Nursery, which was fairly simple - she was just going to fly in through the window and move around the room. So there I have three speakers hidden in the walls and on the truck. But as we get into Neverland, when the set comes up from the drum and revolves around, we don't have any speaker tie-lines that we could be sure would work. So in order to move



L-R: Claudie Blakley, Jenny Agutter and Daniel Evans in Peter Pan. photo: Gautier Deblonde

"Tinkerbell's voice is provided live by actress Sally-Ann Burnett, concealed beneath the stage, her voice given its high-pitched fairy quality by the Yamaha 03D's pitch shifter facility."

Tinkerbell around I had to use the reversed radio, but I only had one channel of that, and one source does not create the impression of movement! So we had to fake it by sending the image through the speakers hidden in the set on stage in the centre of this Neverland island, and drag the image to one side or the other with the MSLs upstage. "This makes it much harder because the levels become more critical. When you drag the image to one side, if the level is slightly out of balance then the image completely changes, as opposed to when there is a speaker off to one side, if the level is different, at least the image is still there.

The Neverland set.

Consequently, it took a great deal of time to programme. Luckily I had Colin Pink as operator, who was very good at keeping track of 18 radio mics and the Yamaha 03D which I had loaded up with playback, using all 24 channels even parallelling the outputs from two samplers into a single channel.It was great having Colin to not only mix all of the radio mics, but also understand the

programming of the 03D and what I was trying to achieve. There was also a Yamaha ProMix 01 for the orchestra, so the total number of channels was up around the 60 - 70 mark."

The reversed radio channel was one of 18 Sennheiser systems used on Peter Pan. "We are lucky to have the Sennheiser system now which is a first rate system - although we don't have quite enough channels, and are constantly shifting them about! I needed 18 radio mics for Peter Pan, and there were only 12 in the Olivier at that point. So I had to beg some from the Lyttleton, and juggle things a little there."

Tinkerbell's voice is provided live by actress Sally-Ann Burnett, concealed beneath the stage, her voice given its highpitched fairy quality by the Yamaha 03D's pitch shifter facility. The 03D was used on Marquee Audio's recommendation after use of the National's Yamaha 02R was ruled out due to space restrictions. Myers says: "I don't think there's any other desk that I could have used to do the same job."

The issue of tie-lines is perhaps Myers' most persistent problem, one which he puts down to the years which elapsed between the original design for the theatre and its eventual implementation - during which time ideas had developed

considerably. "I've worked in quite a few theatres in the United States," understates Myers, "and even in 1970 the idea of putting two tie-lines downstage right was a bit silly. You'd have thought they'd have said 'OK let's have 16 here and 16 on the other side' - or at least something more than two! We have put in some multicores ourselves - I'm actually getting a spec together for Oklahoma at the moment and we'll be putting in more multis for that." Another limitation arose from the Show Control system, running Matt Mackenzie's G-Type software on PC. "It's a useful show control package," explains Myers. "It has basic MIDI abilities, but it cannot record system exclusive, nor can it record continuous

controller information, and I desperately wanted to record fader movement from the 03D."

This meant that what was possible with the creation of pre-set, time-locked lighting cue batches for Tinkerbell, was not possible for Myers' sound effects: "I wanted to break up the sound cues in exactly the same way and lock that in time, then the sound could have been exactly in sync with the light image, but unfortunately that was one of my limitations. Therefore we had to use the internal fade times which only give you 10 seconds of fade time. So some of the moves work OK, and some are not quite so good . . ."

He says this last with a smile, but you'd be hard-pushed to tell which moves he is referring



Sound designer Scott Myers with the Yamaha 03D and ProMix 01 mixers used on *Peter Pan*.

to - the whole Tinkerbell creation seemed to work perfectly in the performance I saw.

As well as the technical limitations, Myers has also experienced some more vocational restrictions: "Generally sound designers are allotted two weeks of pre-production time, regardless of when the production starts rehearsing. So we're not officially on the production until two weeks before the fit-up. I think most of the sound designers here at the National have to be involved earlier - so we're constantly sneaking away and going into rehearsal rooms or production meetings, sometimes months before the fit-up - otherwise you really can't do your job. A lighting designer will be involved from an earlier stage - you have to work with the concept of a production

as it forms. You can't just come in cold two weeks before."

For this reason, Myers believes that sound designers have been overlooked with regard to their contribution to the creative evolution of productions. While theatre lighting design has long been recognised as an artistic discipline, the role of sound designers has been less well recognised. Myers himself - one of the first to use the term 'sound designer' now believes that things are changing for the better, with theatre directors being more receptive to both the skill of the sound designers and the technology at their disposal.

Myers sees the situation at the National Theatre as a kind of halfway house between the luxuries of the West End or Broadway and the back-to-basics approach he encounters in his work outside of the National. He explains: "I do some designs outside the building - for example at the Hampstead Theatre, where you have four speakers and two MiniDisc machines! It's very good for me as a designer to have to limit myself - to get back to basics. That's why I love doing sound designs outside the National with those constraints. We are lucky at the National in that we have high quality productions and fairly strong budgets. Then, on the other hand, it's great if a show transfers to New York and I just say I want this, this, this and this and there's no argument. But then, of course, I have no excuses!"



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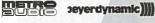




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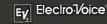
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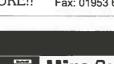




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IN PROFILE

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L+SI talks to lighting designer Nick Sholem

Like most rock and roll lighting designers of a certain age, Nick Sholem has a few benchmarks in his career that stand-out. "Points where I knew with certainty this is what I wanted to do, and moments when I've received that tap on the shoulder, moments that I'll never forget." Born in Fulham in 1954 Sholem had a happy, largely uneventful childhood. His mother was a primary school teacher, his father an executive in the paper manufacturing industry. The biggest disruption to mar his upbringing was the relatively mild trauma of moving to Cheshire, his dad having been posted North. "But it was influential. I went to Hough County Secondary School in Wilmslow. When I was in my third year I failed a maths test, badly I thought, and was not surprised to have my name called out at assembly by the Headmaster. I reluctantly went to his office expecting the worst. But he completely failed to mention the test and instead asked me to come in 20 minutes early the next day and set up his lectern, microphone and a couple of lights. That's when the rot set in."

By the time he'd left Hough, Sholem had become master of all things technical in the school drama department, and had aced his schoolboy career by being invited to the local Girls Grammar school where he, amongst 400 girls, stage managed the school play. "I left at 16, not an outstanding scholar and apprenticed to the then GPO as a telephone engineer." And coincidentally moved back to London, his father now having been recruited down to Ruislip. "Down the road from where we lived was the Ickenham Youth Theatre, directly opposite the tube station. I joined immediately. I loved it and spent every waking hour there and learnt a lot about lighting and set building -I even produced Gawain and the Green Knight." One of those big moments soon appeared. "We had a huge piece of scenery that needed moving and a local chap, Roger Serle, who worked for The Who turned up in the band's 10 tonner to shift it. I was just 17 and I had no idea band's used such big vehicles. I was impressed."

They're friends now, but Sholem's route to music, and The Who especially, was to be slightly more circuitous. "I used to go drinking



Lighting designer Nick Sholem.

at a pub in Northwood - The Case is Altered - which used to be frequented by roadies (I think it still is) and met Pete Varco who worked on the sound for a band called Duffy. He used to get me to go along to gigs and help out. Eventually one day he called and said 'how would I like to go on a one month tour of Austria with Duffy?'"

For the curious amongst you, Duffy were one of those bands of limited talent who were destined for anonymity. And so it was to prove in Austria. "The whole thing was a disaster: I ended up having to call my parents and get them to send money to the Embassy so I could fly home." Yet curiously his father, who by this time was at the top of his industry - frequent trips to Brussels to discuss European Paper policy, that sort of thing - didn't try to dissuade Sholem from his chosen path. "In fact, it was only a few days later when I got a call from Principal Edwards (another band in the mould of Duffy with slightly more talent) and I decided to quit the GPO and go full time. Now years later my dad says it was the best thing I've ever done. Anyway, shortly after I started, the band's lighting guy disappeared - 'you're it' they said. Well, it wasn't exactly challenging; some Patt 23s and couple of Patt 123s and a home-made desk of household lighting switches - the whole thing ran off a 13A plug. But it did get him to meet Miles Copeland: "He turned up and wanted to manage the band - he also managed Wishbone Ash who at the time were pretty big. "I ended up working for Miles's company Scope Equipment Hire, at the back of Capital Radio next to Midas and Martin

Audio. I went on my first tour of the US with Wishbone in '74 - Principal Edwards hadn't worked out - and while there was introduced to Renaissance, another Copeland act. Between them and Wishbone that was my career for the next five years, flip-flopping between the two. Fortunately, Miles never put them on the road at the same time."

In amongst all this, Sholem found the time to marry Emily in 1979. One of the road's more enduring marriages, they've been together ever since and have two boys - Timothy (15) and Matthew (10). The brother of Martin Turner, Wishbone's bass player

(one Kim Turner) had been taken on by Miles to look after a new band called The Police. It wasn't a connection immediately made, but by the time the band were on their third world tour with Zenyatta Mondatta, Sholem was asked to jump across and in 1980 did his first tour of Australia and New Zealand. "Since then, right up to the present, I've always worked for Sting."

Which is a fair job of work, but Sholem's no one horse jockey. He has, without seeking it, been selected for some quite special events in the recent past. "Brian Croft put my name forward to do The Who reunion tour in '89 (there's that Roger Serle connection finally surfacing - though ironically he wasn't with the band by this time), and it was a couple of years later when I got this amazing call. I was in South America somewhere when someone from production came up and said there's a call for you. 'Who is it?' - 'Don Henley'. Well he'd seen some of my Sting shows and wanted me to light the Eagles tour." Seems like Sholem has the reputation for re-union tours. Glenn Miller anyone?

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And not mess.

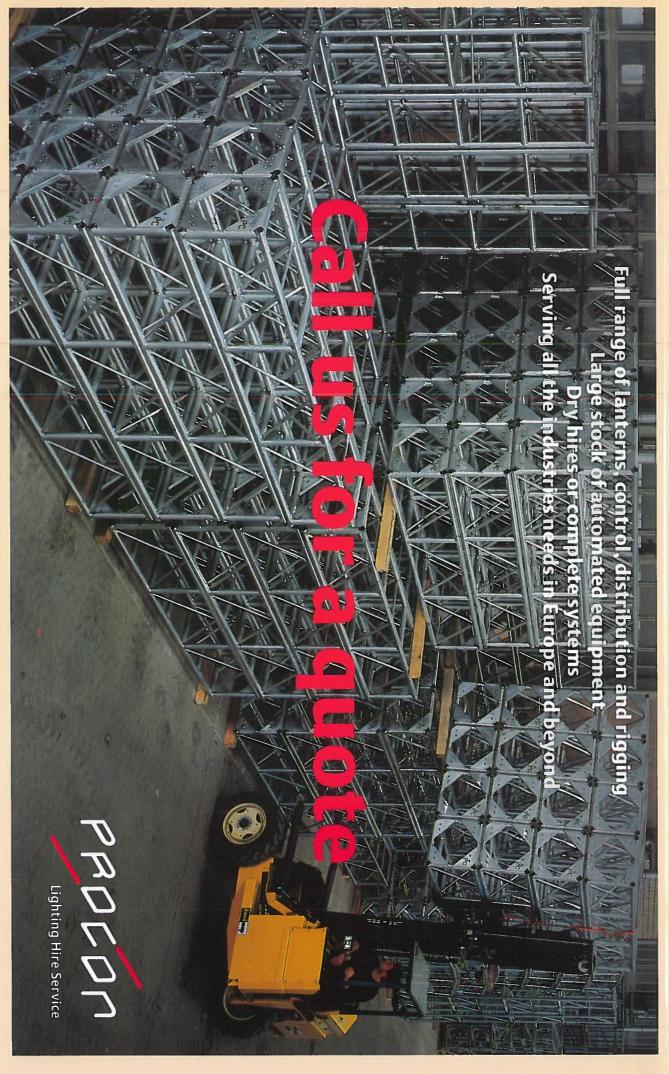
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Thomas: Tower Truss 12", 15", Medium Duty, Heavy Duty, Pre-Rig Truss, Supertruss, Supermegatruss · Tomcat: Tower Truss 12", Medium Duty, Heavy Duty

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